



FINALLY: QUARK 6 FOR OS X P.42

Our experts put it through its paces—and they aren't impressed. Find out why.



FINAL CUT PRO 4 P.44

Reviewed: The best video-editing software—EVER.

85

**SEP
2003**

MacAddict

A BETTER MAC E. A BETTER GAZINE

EXCLUSIVE PHOTOS

G5

THE DEFINITIVE ANALYSIS

- ➔ Why It's a Revolutionary Leap & Not Just Another Makeover
- ➔ G4 vs. G5: Every Hardware Feature Compared

"We've caught up with the PC—and passed them."
—STEVE JOBS

SNEAK PEEK



OS 11?

PANTHER: 100 HOT NEW FEATURES YOU GOTTA HAVE

WE DARE YOU!

THE GEEK QUIZ

Test your Mac smarts: Can you beat the MacAddict übergeeks?

REVIEWED

➔ iSight, Painter 8, Olympus C-740 Ultra Zoom, REALbasic 5.1, Harry Potter and the Chamber of Secrets, i70 Color Bubble Jet, Xserve RAID, Reason 2.5, iPodDock, SoundSoap, and much more...



WIN!

Nikon Coolpix digital camera and 2GB memory card
p.95

HOW TO:

- ➔ Tame Entourage
- ➔ Run Vintage Apps
- ➔ Protect Your Privacy



\$7.99US \$9.99CAN

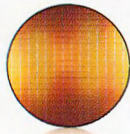


0 9>

0 71486 01096 8

The world's fastest personal computer.

The new Power Mac G5 is here. It's the world's fastest* personal computer, and the first with a 64-bit processor. At its heart are two revolutionary PowerPC G5 processors, running at speeds up to 2GHz. And since these are 64-bit processors, they can access up to 8GB of memory in the Power Mac G5, which is double the 4-gigabyte memory ceiling of every other PC in the world. The G5 processors also have the world's fastest frontside bus, running at 1 gigahertz, which gets data to the processor almost twice as fast as the 533-megahertz bus found in the next-fastest personal computer (a dual 3.06GHz Xeon machine).



*The PowerPC G5 chip.
The world's first 64-bit
processor for personal
computers.*

In side-by-side speed tests using industry-standard benchmarks, the dual 2.0-gigahertz Power Mac G5 is up to 41% faster than both the fastest Pentium 4 and dual-processor Xeon workstation. And the results get even better when using real-world applications:



*The PowerPC G5 chip is based
on IBM's highest performance
64-bit supercomputer processors.*

the new Power Mac G5 runs Photoshop more than twice as fast as the fastest PCs. Further tests reveal there are similar gains across a wide range of applications, from music and video to science and mathematics. Impressed? We haven't even touched on the Power Mac G5's other features. Like its ultrahigh-bandwidth system architecture, featuring AGP 8X, PCI-X, FireWire® 800, Gigabit Ethernet, up to 500 gigabytes (yes, that's half a terabyte) of internal Serial ATA storage and a SuperDrive™ for DVD authoring. All inside a stunning, professional-quality aluminum enclosure that features four discrete computer-controlled cooling zones for whisper-quiet operation. Together, they make the Power Mac G5 a true breakthrough in personal computing.

SPECint_rate 2000: Integer calculations

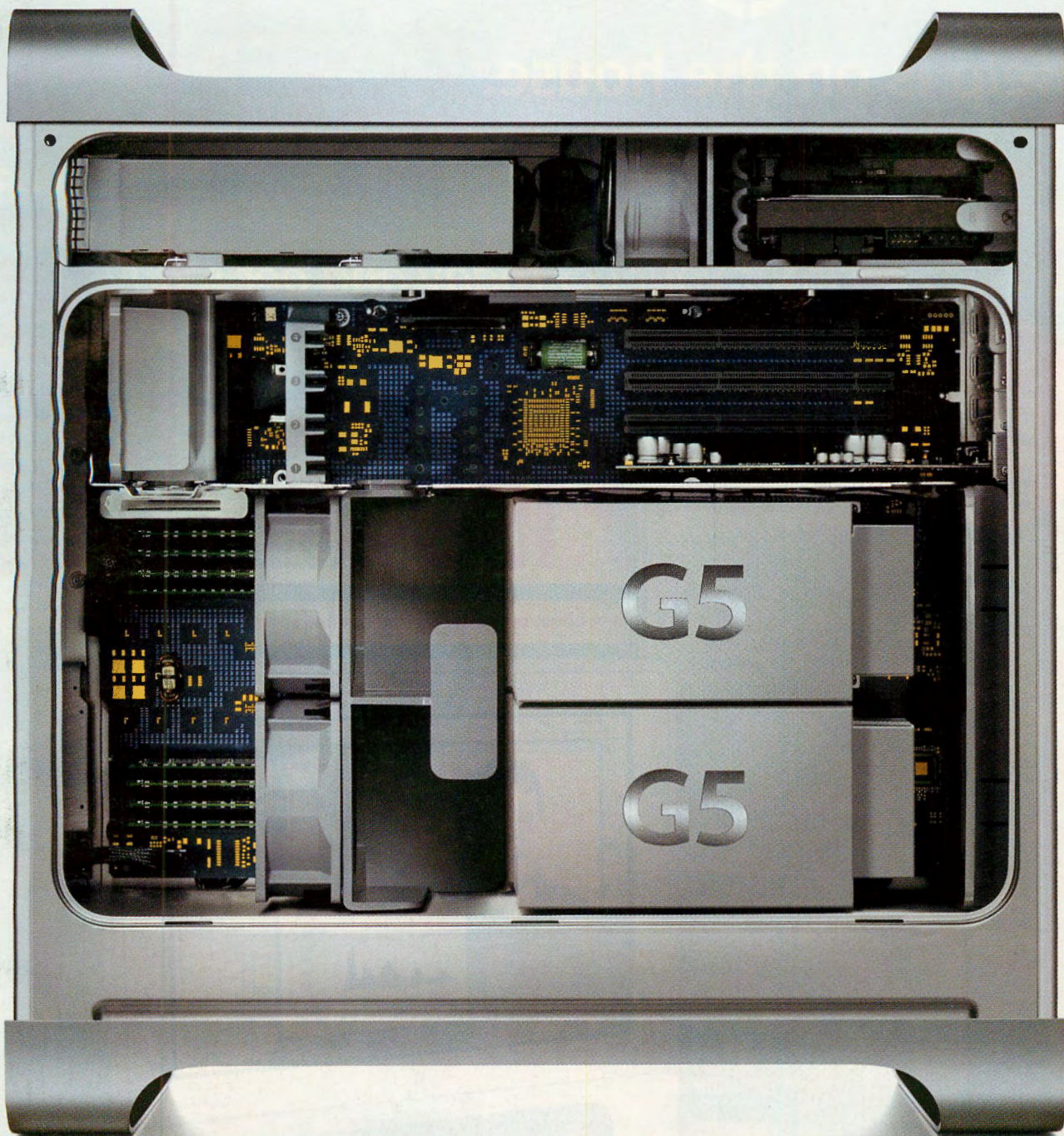
Dual 2GHz PowerPC G5	16.9
Dual 3.06GHz Xeon	10.7
3GHz Pentium 4	10.3

SPECfp_rate 2000: Floating-point calculations

Dual 2GHz PowerPC G5	15.8
Dual 3.06GHz Xeon	11.1
3GHz Pentium 4	8.1

Independent tests show the Power Mac G5 edges out the competition on integer and blasts past them in floating-point.





TM and ©2003 Apple Computer, Inc. All rights reserved. SPEC is a registered TM of the Standard Performance Evaluation Corp. IBM and PowerPC are registered TMs of IBM. *Performance claims based on SPEC® CPU 2000 benchmark results and leading professional application performance tests of a dual 2 GHz Power Mac G5 (shown), 3 GHz Pentium 4-based Dell Dimension 8300 and 3.06 GHz Dual Xeon-based Dell Precision 650. SPEC CPU 2000 benchmarks run with GCC 3.3 and independently tested; professional apps tested by Apple, 6/03. See www.spec.org or www.apple.com/powermac for more information or call 1-800-MY-APPLE.

mac warehouse®

Help is on the house.sm

*Order your G5 today and get ready
for the performance of your life!*

Dual Processor
2GHz Power
Mac® G5:
Apple's fastest
personal
computer!

NEW! Apple Power Mac® G5s as low as

\$1994⁹⁵!

1.6GHz Power Mac® G5/
256MB SuperDrive™ SDRAM/
80GB Serial ATA/Item #CPU1873.

Ask about our exclusive time-limited special offers when you call!



Monitor
sold separately.



Authorized Reseller

Our Tech Support specialists are on-call to support you FREE for the lifetime of your products.

These specialists hold industry certifications on the latest technology from the leading manufacturers, including:

A+ Certified

Adaptec Certified

Apple Certified Desktops

Apple Certified Laserwriters

Apple Certified Servers

Apple Learn & Earn

Cisco CCNA

IBM PSE

MicroSoft MCSE



Chris
Mac Warehouse
Technical Support Manager



Call us today!

800-ALL-MACS

(800-255-6227)

macwarehouse.com

For Canadian inquiries and orders
please call 877-375-4210

mac warehouse®

Check out these great gadgets for your Mac!



Logitech MX310 Optical Mouse
Responds instantly to even your fastest movements with accuracy and control.

IN10915

\$29⁹⁵

Crywolf Cool Mac Keyboard

The wipe-clean, fully rollable take-anywhere USB keyboard — as flexible as you are!

IN10689

\$59⁹⁵



Palm® Zire™ 71

Drool-worthy good looks, a built-in camera and a killer color screen.

PDA1291

\$299⁹⁵



Griffin Laptop Stand

Turn your laptop into an ergonomically-designed desktop.

AC32094

\$39⁹⁵



iView Mac

Turns any television into a large screen computer display.

DRI4532

\$124⁹⁵



LaCie 400GB Hard Disk

LaCie thought BIG when they built this drive — it delivers up to two days of digital video at 400Mbps!

DR16455

\$769⁹⁵



Dr. Bott ExtendAIR External Antenna

Browse the Web from your backyard this summer — this external antenna extends your AirPort® range up to 250 feet!

DEB3778

\$99⁹⁵



Kensington USB Keyboard

Designed for your Mac, with USB ports at each end and a soft-power button.

IN9957

\$39⁹⁵



Universal Car/Air Adapter for Apple

Never get stuck with a dead laptop battery again.

AC32668

\$59⁹⁵



Apple iSight Video Conferencing Camera
The eyes and ears of iChat AV!

IN10951

\$144⁹⁵



Targus Universal AC Power Adapter for Laptops

Ultra thin, ultra light and ultra portable.

VW117175

\$99⁹⁵



Wacom Steel Graphire
Edit your favorite photos or draw and paint on your computer!

INP2357

\$99⁹⁵



Kensington Liberator Laptop Carrying Case

This case fits your lifestyle! Open the expandable zipper and it's big enough to take on a trip.

AC31242

\$69⁹⁵



Logitech High Resolution Optical Mouse
The optical sensor mouse.

INP2447

\$19⁹⁵

Interlink Communicator Remote

Enjoy complete control of your presentations.

VW112946

\$49⁹⁵



We have everything you need for your Mac lifestyle, all in one place and ready to ship —

Mac Warehouse offers all the hardware, software and peripherals you need to build — or upgrade — a state-of-the-art computer system

Plus Free basic lifetime tech support for every product we sell!

Call us today!

800-ALL-MACS

(800-255-6227)

macwarehouse.com

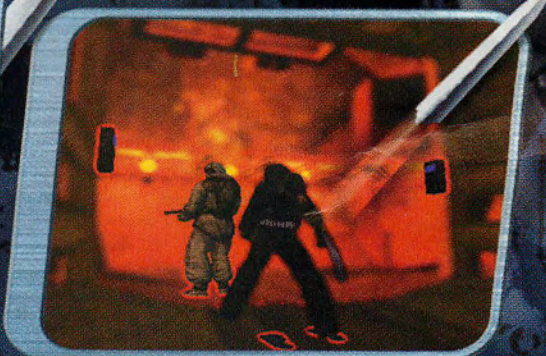
For Canadian inquiries and orders please call 877-375-4210

Prepare to meet your makers.



*Unsheathe your razor-sharp
claws and unleash lethal
combo attacks.*

*Use your heightened mutant
senses to detect heat when
tracking enemies.*



*Face off with Sabretooth,TM
Wendigo,TM JuggernautTM
and MagnetoTM.*



SNIKT!

SNIKT!

SNIKT!

WOLVERINE'S REVENGE

www.aspyr.com



BLOOD
VIOLENCE



ASPYRTM

MARVEL

ACTIVISION

**ONLY IN
THEATERS**

X2 Motion Picture Elements: © 2003 20th Century Fox Film Corporation. All rights reserved. MARVEL, X-MEN, Wolverine and all Marvel characters and the distinctive likenesses thereof are trademarks of Marvel Characters, Inc., and are used with permission. Copyright © 2003. All rights reserved. www.marvel.com. Game code © 2003 Activision, Inc. and its affiliates. Published and distributed by Activision Publishing, Inc. Activision is a registered trademark of Activision, Inc. and its affiliates. All rights reserved. The ratings icon is a registered trademark of the Interactive Digital Software Association. The Aspyr logo is a trademark of Aspyr Media, Inc. Mac and the Mac logo are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. All other trademarks and trade names are the property of their respective owners.

MacAddict

features 20 Welcome to the Future

Here's our expert analysis of Apple's fastest, coolest, and flat-out powerfulest Power Mac ever. **by Rik Myslewski**

26 Panther Uncaged

Apple has unveiled the next version of Mac OS X, and neither Finder windows nor instant messaging will ever be the same again.

by Narasu Rebbapragada and Cathy Lu

32 The Ultimate MacAddict Quiz

It's that time of year again—time to match wits with our quiz and aspire to the majestic rank of Terminal Geek. **by the MacAddict staff**



Paul

John

George

Ringo



Holey Computer, Batman!

how to

60 Ask Us

Increase the size of text on Web pages, network your old and new Macs, revive the Mac OS X Setup Assistant, and more.



See *The Matrix* on a cinema screen—Mac-style.

62 Protect Your Privacy with AppleScript

AppleScript can help you safeguard where you surf, whom you email, and what you've been up to.

by Johnathon Williams

66 Manage Multiple Accounts in Entourage

Are you going crazy trying to manage all of your email personalities? Even if you're suffering from multiple-personality psychosis, we can help.

by Cathy Lu

68 Go Old School with Mac OS X

Don't throw away your floppies! Here's how to run some of your favorite software relics in Jaguar.

by Emory Christensen



Sorry, Dr. Rorschach, but I don't see anything.

every month

12 Editors' Page

The best and the brightest minds in the universe are toiling away for your benefit.

14 Get Info

Hats off to developers! We talk to a number of them at Apple's Worldwide Developers Conference, and then take you behind the scenes of MacHack, the ultimate Mac-hacking competition. Plus, how to get FireWire 800 and why Internet Explorer is going bye-bye.

41 Reviews

- 48 **Amapi Designer 7** 3D-modeling software
- 56 **Auto Kit for iPod** iPod car charger and preamp
- 52 **C-740 Ultra Zoom** 10x-zoom digital camera
- 44 **Final Cut Pro 4** video-editing software
- 50 **Final Scratch** digital DJ setup
- 53 **Harry Potter and the Chamber of Secrets** action-adventure game
- 55 **i70 Color Bubble Jet** portable photo printer
- 56 **iPodDock** dock for first-gen iPods
- 54 **iSight** FireWire Webcam
- 56 **I-Trigue i3350** 2.1 speaker set
- 57 **Medal of Honor Allied Assault: Spearhead** game expansion pack
- 46 **Painter 8** painting and drawing software
- 54 **Pocket Digital** instamatic digital camera
- 42 **QuarkXPress 6** page-layout software
- 51 **radiaL** audio-looping software
- 49 **REALbasic 5.1** software development environment
- 55 **Reason 2.5** software sound studio
- 51 **SoundSoap 1.1** noise-removing software
- 47 **Xserve RAID** server-class RAID array

58 The Hot List

The best of the best from recent reviews. If the editors of MacAddict went shopping, this is what we'd buy.



QUICK TIPS

FROM THIS MONTH'S ISSUE

➔ DON'T CHAT WITH YOUR MOUTH FULL

Apple's iSight Webcam has a slick integrated lens iris that blocks the view when you twist the lens ring. Use it to save face when chatting over lunch, or when you need to daintily extract a booger.

From **Reviews**, p54



➔ MAKE TEXT BIG—OR SMALL

Press Command-plus sign (+) or Command-minus sign (-) in your browser to quickly increase or decrease the size of text on a Web page.

From **Ask Us**, p60



➔ MAKE APPLESCRIPT HAPPY

AppleScript is case-sensitive; if a script isn't working, check to make sure you've typed file and folder names correctly. From **"Protect Your Privacy with AppleScript,"** p62

➔ SEE YOUR BUDDIES

In iChat AV, buddies who have a camera connected will have a video camera icon next to their name.

From **"Panther Uncaged,"** p26



➔ CLONE YOUR IDENTITY

To create a new identity in Entourage while still maintaining your contacts from an old identity, you can clone an existing account and then tailor it. From **"Manage Multiple Accounts in Entourage,"** p66

94 Log Out

94 Letters

It's a good day when Chinua Achebe makes it into *Letters*, PCs are put out for garbage day, and someone's application bursts into flames.

95 Contest

Win a 5.1-megapixel Nikon Coolpix 5400 and a 2GB Lexar Media CompactFlash card.

96 Shut Down

The real wallflowers: Hear from the artists left behind in Apple's pursuit of independent music for the iTunes Music Store.

Hey diddle diddle,
the cat and the
fiddle, the unicorn
jumped over
the piano.



96 Timothy Tesh

Three Questions Other Memory Providers Hope You'll Never Ask...

Were you awarded Computer Shopper's "Best Place to Buy RAM" two years in a row?

50,000 readers in 51 computer-related categories voted Crucial **Computer Shopper's** "Best Place to Buy RAM" two years in a row!



"As the official factory outlet for Micron Technology's RAM-manufacturing facilities, (Crucial) offers near-wholesale pricing for a broad array of top-quality memory modules...you have to wonder why anyone would buy memory anywhere else."

— Computer Shopper magazine

Do you actually make the memory you sell?

WARNING! Listen carefully to the answer when you ask this question. Other memory companies claim to manufacture memory, too. What they actually do is assemble the memory chips made by someone else into memory modules. Ask them this: Do you make the chips that go on your memory modules? The chips are the important part, after all.

Crucial is the only memory upgrade supplier that's part of a major DRAM manufacturer, Micron. We actually make the chips that go on the modules. In fact, because the world's leading

computer manufacturers use our memory, chances are good that the memory in your system right now came from Micron. Crucial brings this same high-quality memory directly to you. It only costs less because you don't pay middleman mark-up fees.

Do you offer easy access to over 100,000 guaranteed-compatible upgrades for more than 20,000 systems?

Finding the right memory for your specific system can be confusing—and risky. With so many different systems and so many different types of memory, you can't just buy a "128MB memory module" and be assured that it will work in your system.

Using Crucial's award-winning Memory Selector™, finding the right memory is as easy as 1, 2, 3. In just three easy clicks, you'll find your upgrade—and it's 100% guaranteed to be compatible with your specific system or we'll give you your money back. With more than 100,000 upgrades for over 20,000 systems, including more than 390 upgrades for over 150 Apple systems alone, we've got what you need.



"I no longer have to wait for my machine to be responsive, and I am now back in the "speed" demon seat. If you want to improve the capacity of your Powerbook, I offer no hesitation in recommending the Crucial 512MB PC133 SODIMM upgrade."

— EnvyNews.com

Over 390 Apple upgrades...

- ✓ For over 150 Apple desktops, notebooks, workstations, and servers.
- ✓ 100% compatibility guarantee
- ✓ Free technical support
- ✓ Limited lifetime warranty

Factory-direct quality and savings!

128MB SDRAM... As low as **\$37.99**
256MB SDRAM... As low as **\$60.99**
512MB SDRAM... As low as **\$137.99**

FREE SHIPPING*

crucial
TECHNOLOGY
A Division of Micron

The answers to all your Apple memory questions are just a click away!
<http://promo.crucial.com> keycode: **3mad**
or call toll-free 1-888-363-2562 to talk to a memory advisor.

*See Web site for details.

Prices may vary according to specific system requirements. The price listed was valid on 7/7/03 when we sent this ad to the publisher; however, prices may have dramatically increased or decreased since then. Visit the FAQ section of Crucial.com to learn more about why memory prices go up and down.

© 2003 Micron Technology, Inc. All rights reserved. Crucial, Crucial Technology, the Crucial Technology logo, and The Memory Experts are trademarks/service marks of Micron Technology, Inc. in the U.S. and outside of the U.S. All other trademarks are the property of their respective owners. Crucial Technology is not responsible for omissions or errors in typography or photography.

the disc

Play, Create, Protect

This month's Disc nurtures your inner child, your inner artist, and your inner paranoid. In addition, we've got high-powered audio software, cool graphics tools, and the final installment of Internet Explorer for the Mac—a total of 47 hot apps.

Harry Potter and the Chamber of Secrets demo

We hear there's one old guy in Jizzax, Uzbekistan, who's never heard of Harry.



Painter 8 demo

The world's greatest natural-media painting program is now easier to use than ever before. Take it for a spin and see for yourself.



WILD ABOUT HARRY

HARRY POTTER & THE CHAMBER OF SECRETS

VirusBarrier X demo

One downside to Mac OS X is that virus writers are practiced at penetrating its Unix core. Luckily, there's VirusBarrier X.



ontheDisc

AUDIO & MUSIC

AAChoo 1.1
AudioTools Pro (Classic) 4.2
AudioTools Pro (OS X) 4.2
Mirator 1.0.6
RadioLover 1.16x
Reason (OS 9) 2.5 demo
Reason (OS X) 2.5 demo

DEVELOPMENT

REALbasic 5.2 demo

FUN & GAMES

AirPong 1.0
DemonStar 1.1
Harry Potter II demo
MoH-Spearhead 2.15 demo
Roadworks 1.0
Roadworks OS X 1.0
Simodifier 1.2 demo
Solace 1.02

GRAPHICS & MULTIMEDIA

Amapi Designer 7 demo
Cinematics 1.0.1
iView MediaPro 1.5.7 demo
Painter 8 trial
Variable Speed Player 1.0
Web Menu Assistant Classic 1.0
Web Menu Assistant X 1.0

INTERFACE

OSXII 0.7b
Tito & His Tin-Friends
Unstoppable Progress 2.0.1
ZTerm (OS X) 1.1b7

INTERNET & COMMUNICATION

Acquisition 0.94
ContentBarrier X demo
Internet Explorer X 5.2.3
Mac2Phone 1.8
NetBarrier X demo

iChat iSores



Now that iChat AV has added a video dimension to chatting, the MacAddict staff discovers that it's important to look your best and be on your best behavior.

PRODUCTIVITY

Budget X 4.0.4
Chartsmith 1.2.2 demo
DeltaGraph 5.0 demo
iOrganizeX 4.4.6
Spelling Corrector 1.0

UTILITIES

Data Recycler X 1.2
DiskTracker (OS X) 2.3
DiskTracker 2.3
Gammawork 1.5
Jargonary 1.0
Laze E. 1.0.1
MP3-Info CMM 1.2
PersonalBackup X demo
Pod 2 Pod 1.0

VirusBarrier X demo

SPONSORS

DriveSavers: Lost Data video promo
IK Multimedia: AmpliTube Live promo
Intego: ContentBarrier X 10.0.2 demo
Intego: NetBarrier X 10.1 demo
Intego: PersonalBackup X 10.1 demo
Intego: VirusBarrier X 10.0.1 demo
Prosoft: Data Recycler 1.2 demo
REAL Software: REALbasic 5.2 demo

MacAddict

PUBLISHER **Chris Coelho**
EDITOR IN CHIEF **Rik Myslewski**

EDITORIAL

MANAGING EDITOR **Jenifer Morgan**
EXECUTIVE EDITOR **Cathy Lu**
SENIOR EDITORS **Narasu Rebhappagada (news)**, **Kris Fong**
ASSOCIATE EDITOR **Niko Coucouvanis (reviews)**
EPONYMEDITOR **Max**
CONTRIBUTING EDITORS **David Biedny**, **Joseph O. Holmes**,
Helmut Kobler, **Frank O'Connor**, **Angus Paldan**, **Ian Sammis**,
Deborah Shadovitz, **Andrew Tokuda**, **Buz Zoller**

ART

ART DIRECTOR **Christopher Imlay**
ASSISTANT ART DIRECTOR **Peter Marshutz**
PHOTOGRAPHER **Mark Madeo**
CONTRIBUTING PHOTOGRAPHER **Samantha Berg**

PRODUCTION

PRODUCTION DIRECTOR **Richard Lesovoy**
PRODUCTION COORDINATOR **Hans Hunt**

ADVERTISING

EASTERN ADVERTISING DIRECTOR
Bernie Lanigan, 212-768-2966 x4001
WESTERN ADVERTISING DIRECTOR
Dave Lynn, 949-360-4443
NATIONAL ACCOUNT MANAGER
Nate Hunt, 415-656-8536
NATIONAL SALES MANAGER
Stacey Levy, 925-964-1205
SENIOR ACCOUNTS MANAGER, DIRECT SALES
Ana Epstein, 415-656-8416
AD COORDINATOR **Jose Urrutia**, 415-656-8313
SENIOR MARKETING MANAGER **Alison McCreery**

CIRCULATION

GROUP CIRCULATION DIRECTOR **Tina Rodich**
NEWSSTAND MARKETING MANAGER **Mimi Hall**
BILLING AND RENEWAL MANAGER **Mike Hill**
FULFILLMENT MANAGER **Angela Martinez**
DIRECT MARKETING SPECIALIST **Mary Nicklin**



Future Network USA
150 North Hill Drive,
Brisbane, CA 94005

NON-EXECUTIVE CHAIRMAN **Roger Parry**
CHIEF EXECUTIVE/FUTURE NETWORK **Greg Ingham**
CEO/MARKETING DIRECTOR UK **Colin Morrison**
GROUP FINANCE DIRECTOR **John Bowman**
PRESIDENT **Jonathan Simpson-Blint**
VP/EDITORIAL DIRECTOR, GAMES **Matt Firme**
VP/CFO **Tom Valentino**
VP/CIRCULATION **Holly Klingel**
EDITORIAL DIRECTOR, TECHNOLOGY **Jon Phillips**
GENERAL COUNSEL **Charles Schug**
PUBLISHING DIRECTOR **Simon Whitcombe**
DIRECTOR OF CENTRAL SERVICES **Nancy Durlister**

Future Network USA is part of The Future Network plc. The Future Network produces carefully targeted specialist magazines for people who share a passion. We aim to satisfy that passion by creating titles that offer value for money, reliable information, and smart buying advice, and which are a pleasure to read. Today we publish more than 90 magazines in the US, UK, France, and Italy. Over 80 international editions of our magazines are also published in 28 other countries across the world. The Future Network plc is a public company quoted on the London Stock Exchange (symbol: FNET).

Tel +44 1225 442244 • www.thefuturenetwork.plc.uk
Media With Passion
Bath, London, Milan, New York, Paris, San Francisco

REPRINTS: For reprints, contact Reprint Management Services, Maggie French, 717-399-1900 x178 or mfrench@reprintbuyer.com.

SUBSCRIPTION QUERIES: Please email mcusercontent@cdsfulfillment.com or call customer service toll-free at 888-771-6222.

Volume 8, Issue 9

MacAddict (ISSN 1088-548X) is published monthly by Future Network USA, 150 North Hill Dr., Brisbane, CA 94005, USA. Periodical-class postage paid at Brisbane, CA, and at additional mailing offices. Newsstand distribution is handled by Curtis Circulation Co. Basic subscription rates: one year (12 issues + 12 CD-ROMs) U.S. \$39.90, Canada \$43.95, U.S. prepaid funds only, Canadian price includes postage and GST 128220688. IPM 0962392. Outside the U.S. and Canada, price is \$53.95, U.S. prepaid funds only. POSTMASTER: Send address changes to MacAddict, P.O. Box 5126, Harlan, IA 51593-0626. Future Network USA also publishes Maximum PC, PC Gamer, Official Xbox Magazine, and PSM. Entire contents copyright 2002, Future Network USA. All rights reserved. Reproduction in whole or in part is prohibited. Future Network USA is not affiliated with the companies or products covered in MacAddict. Ride-Along enclosure in the following edition(s): A3, B, B1, B2, B3. PRODUCED IN THE UNITED STATES OF AMERICA.

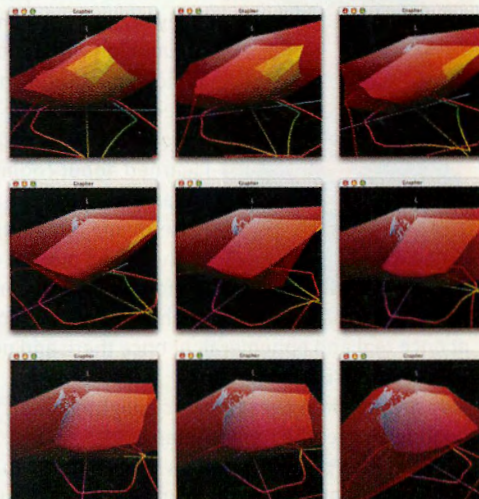
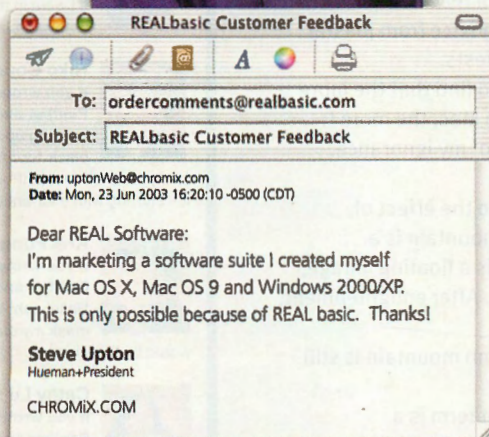
UPGRADE

If you don't receive the Disc with your copy of MacAddict, you might want to consider upgrading. Each monthly disc contains cool demos, useful shareware and freeware, and the inimitable MacAddict Staff Video. To get 12 issues of MacAddict that include this value-packed disc with your subscription (prorated if necessary) for just \$1 more per issue, call 888-771-6222—the operator will take care of everything.



REALStories

CHROMiX ColorThink



What can you do with **REALbasic**?

Ask Steve Upton.

He had never worked as a programmer until he discovered **REALbasic**. He created successful software products that compare color between the computer screen and printed output.

What makes **REALbasic** different?

EASY to learn and fun to use

MODERN, object-oriented version of BASIC

CREATES software for Mac, Windows and Linux*

Try **REALbasic** today for **FREE**.

Download a copy from the MacAddict CD and see how easy it is to create your own software.

Made with



REALbasic[®]

www.realbasic.com

*coming soon in **REALbasic** version 5.5. ©2003 REAL Software, Inc. **REALbasic** is a trademark of REAL Software, Inc. All other names mentioned are trademarks or registered trademarks of their respective holders in the U.S. and other countries.

In Search of Nerdvana

The Sound of One Hand Coding



I spent a week seeking enlightenment at Apple's Worldwide Developers Conference. I sat for many hours in darkened lecture halls in silent communion with thousands of fellow Apple addicts, meditating on sage advice from master coders and hardware high priests.

However, I was dismayed to find that the more I learned about coding for the Mac, the more I became aware of the depths of my ignorance.

Nerdvana remains elusive.

There's an old Zen saying to the effect of, "Before enlightenment, the mountain is a

mountain. While seeking enlightenment, the mountain is a floating mirage, at once real and ephemeral, at once there and not there. After enlightenment, the mountain is a mountain."

In my personal quest for Mac enlightenment, that damn mountain is still floating all over the freakin' map.

I've always prided myself on being a geek. To me, that term is a badge of honor. I love curling up with an exciting white paper on giant magnetoresistive hard-disk technology. But compared to the attendees at this year's WWDC, I could play both Harry and Lloyd in *Dumb and Dumberer*.

Damn, the people who create software for our Macs are a brilliant bunch! Having just spent a week with a whole passel of them, my faith in the future of the Mac is stronger than the aroma rising from the Yankees uniform hampers after an extra-inning game on a sweltering summer day. These heroic gearheads know what they're doing, are passionate about doing it, and are dedicated to making your Mac a life-changing, life-affirming tool.

Yeah, okay, so that might sound like overblown rhetoric—but it's true. Professional Mac developers love the Mac, just as you and I do—more, maybe. More because they understand it better. More because they know about its inner workings. More because they can harness its power.

To them, that mountain in the Zen saying is most assuredly just a mountain—one they've climbed, and upon whose summit they've stood and squinted out at the future (in some cases, through Coke-bottle glasses).

At last week's conference, enlightened Mac developers seemed excited about the Mac's future—which made me excited in turn. And as you'll discover in our coverage of Apple's recent announcements (see p20), it's an exciting time for every one of us Mac addicts.

Enjoy,

Niko

coming soon: october 2003

Our editors fill you in on what they're preparing for the next issue of *MacAddict*.

FEATURES: Product Wars!

We've got a monster, no-holds-barred **product slugfest** that pits competing apps head to head. Also, in my final days of fevered wedding planning, I'm writing about **how to organize your Mac** so that you—like me—can whip your Mac into shape.
—Cathy Lu

REVIEWS: Gear and Games

Our crew is checking out some cool new **FireWire 800 gear** while busily playing—and rating—**Unreal Tournament 2003**, **EverQuest**, and **Spy Hunter**. Also, I'll let you know if RadTech's **Ice Cream** scratch remover can prettify my aging iPod.—Niko Coucouvanis

HOW-TO'S: Hack Safari

Although Safari 1.0 threw a wrench into our **Safari hacking secrets** editorial, we figured out some workarounds, so all is not lost. (However, while working on our **product slugfest**, I *did* get lost in Logic 6.0. What a misnomer!) Also, we'll show you how to **increase your AirPort range**.—Kris Fong

CONTESTS & NEWS: Mac Artists

We'll give you the chance to win a **Digidesign Mbox** and the latest album from DJ Richie Hawtin (aka **Plastikman**). We'll also tell you what musicians **BT**, **Venus Hum**, **Richie Hawtin**, **Stacey Van Buskirk**, and **Anna Sitko** told us about taking Macs onstage for on-the-fly artistry.—Narasu Rebbapragada

STAFF RANTS

Q: If you wrote software, how would you feel about Panther and the Power Mac G5?



Narasu Rebbapragada ROYALLY USURPED
If you wrote software, how would you feel about Panther and the Power Mac G5?

If I were in the PIM (personal information management) software biz, I'd feel like looking for a new job.



Niko Coucouvanis ONE-EYED JACK
If you wrote software, how would you feel about Panther and the Power Mac G5?

I'd hang up my compiler and instead create velvety black-fur-and-anodized-aluminum accessories for Apple's fall lineup. iPod cases, hard drives, hubs, you name it—starting with a fur-lined, sports car-bra thingy for the G5 tower.



Kris Fong OCELOT
If you wrote software, how would you feel about Panther and the Power Mac G5?

Hallelujah! With this hypersonic duo, I'd be able to mask my crappy code skills in bloatware and nobody would be the wiser.



Cathy Lu SINGLE FOR ONE MORE MONTH
If you wrote software, how would you feel about Panther and the Power Mac G5?

I would be kind of annoyed because I'd be canceling my honeymoon and stocking up on lots of pizza, Coke, and sugary goodies for the long nights of coding ahead. Oh, and Krispy Kremes too...mmm!



Jenifer Morgan FAX FOE
If you wrote software, how would you feel about Panther and the Power Mac G5?

I'd be glad not to have the option of creating fax software, and with the time I saved using Xcode, I could plant trees to replenish what those pulp-hog faxers use up.



Chrisaeticus Imlaybus Maximus NERDELLO
If you wrote software, how would you feel about Panther and the Power Mac G5?

Act 3, Scene 2. Nerdello: Here am I, an author of softwares. Tralala through lines of code skip I until...lo, what's that up ahead? A nasty Panther! A box of cold aluminum! Oh, cruel fates, how do they make me feel?! Exit pursued by a panther.



Peter Marshutz PIXOLOGIST
If you wrote software, how would you feel about Panther and the Power Mac G5?

If I wrote software...hmm...I would feel seduced by the friendly interface of Panther and aroused by the power of the Power Mac G5. But then, I'm easily seduced and aroused.



Max ETERNAL OPTIMIST
If you wrote software, how would you feel about Panther and the Power Mac G5?

I'd feel as if a great weight were lifted from my shoulders, the sun broke out from behind a cloud, I found a twenty in an old coat pocket, I aced a math final, and my favorite computer just got a new lease on life.



...SIO OF THE OLD... HUNCH, AS IT EXISTED, IN THE 13TH...
...WITH A BATTLE MA... IN THE 13TH, 14TH, 15TH CENTURIES. ALL OF WHICH...
...NEW REIN, RE... NORMAN REMAINS HAVE BEEN...
...OLD BUILDINGS, CHURCH...
...IN THE JAPAN... 15TH...



FORGOTTEN REALMS

Neverwinter Nights™



Available Now for Macintosh

www.macsoftgames.com



DEVELOPED BY
BIOWARE
CORP



Licensed by:



MacSoft



NEVERWINTER NIGHTS ©2002 Atari Interactive, Inc. All rights reserved. Macintosh version manufactured and marketed by Destineer, Inc. under licence from Atari. Portions © 2002 BioWare Corp. BioWare Aurora Engine copyright 1997-2002 BioWare Corp. All rights reserved. BioWare, the BioWare Aurora Engine, and the BioWare Logo are trademarks of BioWare Corp. All rights reserved. Neverwinter Nights, Forgotten Realms, the Forgotten Realms logo, Dungeons & Dragons logo, Dungeon Master, D&D, and the Wizards of the Coast logo are trademarks owned by Wizards of the Coast, Inc., a subsidiary of Hasbro, Inc. and are used by Atari under license. All rights reserved. Destineer is a trademark and MacSoft is a registered trademark of Destineer, Inc.

DEVELOPERS SPEAK OUT

SPECIAL WWDC COVERAGE!

Apple's WWDC Keynote Sparks Passionate Reactions

More than 3,500 people attended the product-packed keynote address that kicked off Apple's Worldwide Developers Conference held this June in San Francisco. Here's what a few of those tech-heads thought. For more on Apple's WWDC announcements, see our special report beginning on p20.—*Narasu Rebbapragada*



on PANTHER

"This is the upgrade we've been waiting for."

—Cabel Sasser, co-founder of Panic

Panther (\$129, www.apple.com) makes Mac OS X look better than ever, with a new Finder, the all-new Exposé window-management feature, and a host of other improvements—some subtle, some not so subtle. This big cat is scheduled to appear by the end of 2003.

"We're concerned with how Photoshop is going to work when they launch the new operating system. Exposé and the Open and Save dialogs are areas of considerable concern."
—Adam Jerugim, Adobe Photoshop quality-engineering product lead.

"I think it's going to help Apple get up to speed and possibly leapfrog Microsoft and its Corona player."
—Doug Busk, senior manager of third-party revenue at Cingular Wireless, on comparing Panther's Pixlet video codec with the new version of Microsoft's Windows Media Player 9 Series (dubbed Corona).

"It takes a little while longer to negotiate with France."
—Steve Jobs, Apple CEO, on a slight delay in beginning an iChat AV videoconference with former NeXT developer Jean-Marie Hullot who was positioned in the shadow of the Eiffel Tower.

"Absolutely. I have 30 apps on my computer all the time."
—Jim Mach, lead systems engineer for Gap, on whether he'll use Exposé, Panther's advanced window-management feature.

→ "My mother is going to be very happy."

—Andrea Longo, Unix developer, on the return of Labels, from Mac OS 9.

"The built-in fax is interesting because we've been working on our fax solution for some time. Now we may not have to."

—Thomas Ammon, Hewlett Packard test engineer for Mac all-in-one software, on Panther's new built-in fax feature.

"As an individual, I'm disappointed about that."

—Sujal Shah, software engineer at Progress Software, on Panther's \$129 price tag for consumers.

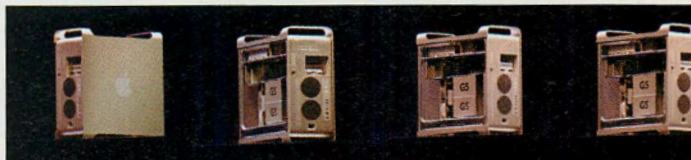
on XCODE

Apple is bundling its new Xcode IDE (integrated development environment)—which includes better debug tools, faster compile times, and a refined user interface—free with Panther.

"There's nothing wrong with competition....You get what you pay for."
—Greg Hemstreet, Metrowerks' director of product marketing, on the comparisons between the free Xcode and Metrowerks's upcoming CodeWarrior 9.

"That's slick."
—Keith Hoerling, student, on Xcode's distributed-builds feature, for spreading compiling across Rendezvous-accessed desktops.

Apple previewed the brand-new Power Mac G5 at WWDC.





At the WWDC keynote, Steve Jobs displayed newly minted IBM 970 chips (left), wheels turned inside the minds of Mac developers (center), and a shiny-faced Al Gore showed off iChat AV (right).

PHOTOGRAPHY BY MARK MADEO

on the POWER MAC G5

BM's muscular 64-bit IBM PowerPC 970 chip powers Apple's new Power Mac G5 lineup. The Dual 2GHz (\$2,999), 1.8GHz (\$2,399), and 1.6GHz (\$1,999) models are scheduled to be available by August 2003.

"No, st no, not for that kind of power."**—James Hale, IT manager at the

University of Melbourne, Australia, on whether the Power Mac G5 is expensive.

"It's about time."—Scott Mielentz, Macintosh administrator for Rexall Sundown, on the announcement of the Power Mac G5.

"It's nice to see the feature—but there's nothing to take advantage of it immediately."—AJ Mohr, field-service engineer for Computer Stores Northwest, on the Power Mac G5's faster 133MHz PCI-X slots.

"I'm thrilled to see IBM so involved—they are an incredible company with incredible expertise."
—Neil Ticktin, CEO of Xplain.

"Sorry, Steve, I'm not going to be buying the Xserve rack after all."—Brad Peebler, Luxology cofounder and president, on the Power Mac G5 being fast enough to compile code for his complex 3D software.

NEW STUFF

DUAL-DRIVE FIREWIRE 400 ENCLOSURES

What it is: This dual-drive FireWire 400 enclosure lets you install two drives of your own choosing. WiebeTech also offers preloaded DuoGB enclosures—you can get a top-of-the-line dual 250GB, 7200-rpm model for \$999.95.

Why it's cool: You can mount the drives separately, as one Mac OS 9 and one Mac OS X drive, or easily configure a RAID 0 or RAID 1 array with Mac OS X's Disk Utility app.

DuoGB

\$179.95 and up
WiebeTech
Available: Now
www.wiebetech.com



Wiebe doublin' the drives.

MOVE OVER LIMEWIRE

What it is: This Mac OS X Gnutella client lets you upload and download various types of copyright-free files directly into your iLife apps.

Why it's cool: While it's not cool to steal music—just ask Steve—there's a lot of legal content to share. Acquisition's interface makes it easy to monitor and streamline uploads and downloads.

Acquisition

\$15
Xlife
Available: Now
www.xlife.com



MP3S IN THE CAR

What it is: You need Virtual PC to run it and a phat wallet to buy it, but the PhatBox's 20GB digital cartridge will sync via USB to your Mac, download MP3 and Audible (spoken) files, and plug into a digital media player in your trunk to play music through your car's stereo system. A list of compatible cars and stereos is available on PhatNoise's site.

Why it's cool: Now you can ditch your cassette-tape adapter or FM transmitter. Check out <http://unix.phatnoise.com> for some hacks that let you set up playlists and other customizations.

PhatBox Media Player

\$859
PhatNoise
Available: Now
www.phatnoise.com



PhatBox syncs to your Mac and plays in your car.

IPOD/CELL PHONE HEADSET

What it is: This headphone/cellular headset combo (shown below) hooks up to your cell phone and your iPod (or other music player) simultaneously so you can listen to music and take calls using the same set of earphones.

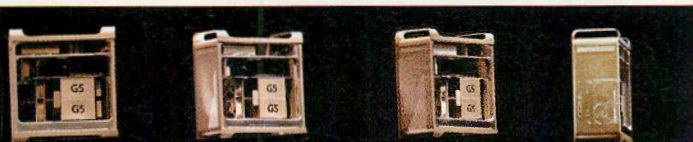
Why it's cool: You can hear your phone ring through the earphones and the music volume lowers if you pick up the call.

Portable Link

\$29.95
Skullcandy
Available: Now
www.skullcandy.com

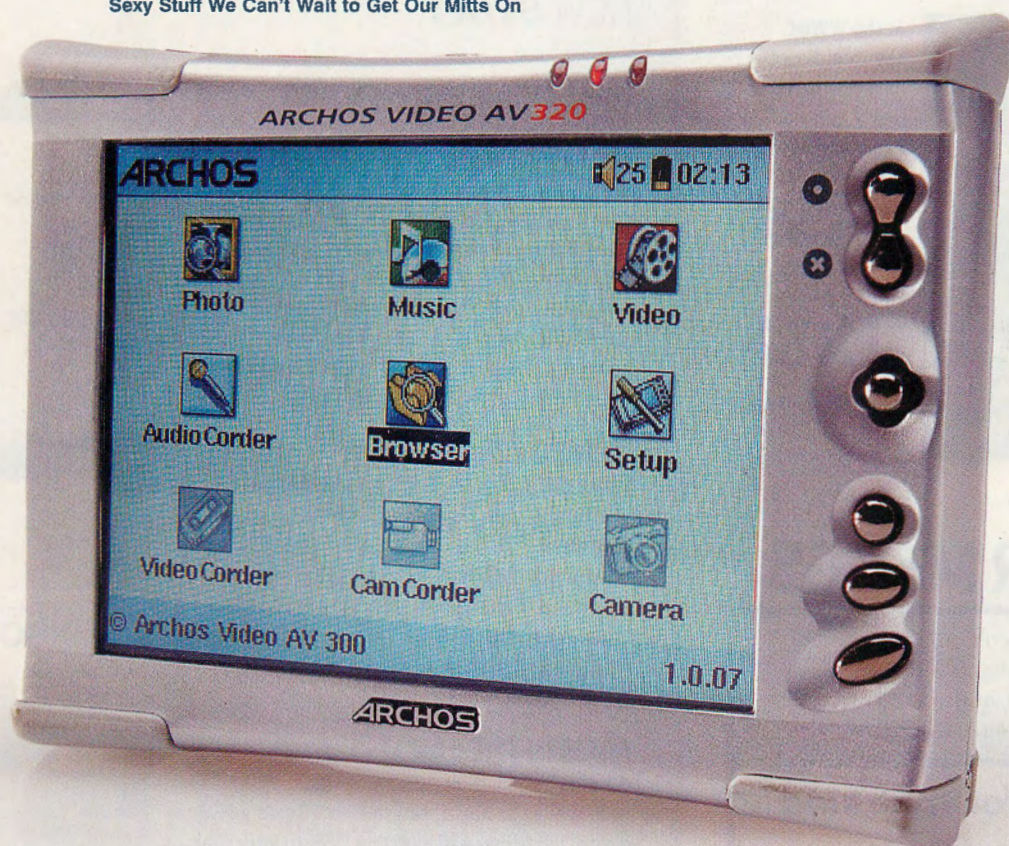


Be your own
digital hub.



DROOLWORTHY

Sexy Stuff We Can't Wait to Get Our Mitts On



Media To Go

Archos AV320 How cool is *this*? Archos's AV320 20GB and AV340 40GB video recorders (\$599.95 and \$659.95, respectively; www.archos.com) play MPEG-4 and DivX video, MP3 audio, and JPEG stills recorded or downloaded from your Mac, stereo, camera, or TV. A 3.3-megapixel AVCam 300 add-on (price unavailable at press time); FireWire interface (\$29.95); and CompactFlash, MMC, and SmartMedia card readers (\$29.95 each) are sold separately.—NR

PHOTOGRAPH BY MARK MADEO



Media and Voice To Go →

Panasonic SV-AV30 Angelina Jolie watches herself in *Lara Croft Tomb Raider: The Cradle of Life* on the Panasonic SV-AV30 e-wear AV recorder (\$399.95, www.panasonic.com). This 3.35-ounce, pocket-size device records and plays MPEG-4 video, JPEG stills, and MP3 and AAC audio. It also functions as a voice recorder. The Panasonic SV-AV30 comes with a 64MB Secure Digital memory card for transferring media, and a docking station that connects to your TV.—NR








PHOTOGRAPHY COURTESY OF PANASONIC

ADD A LITTLE FIREWIRE 800

Peripherals for PowerBooks and Power Macs

These FireWire 800 PCI and PCMCIA cards give FireWire 400-equipped Macs up-to-date FireWire 800 performance.—NR

Product	Company	URL	Price	Ports (800/400)	Computer
 Allegro SW800	Sonnet Technologies	www.sonnettech.com	\$89.95	3/0	Power Mac
 FireWire 800 PCI Card	LaCie	www.lacie.com	\$89.95	3/0	Power Mac
 OrangeLink FireWire 800 1394b PCI Card	Orange Micro	www.orangemicro.com	\$89.00	2/1	Power Mac
 FireWire 800 1394b PCI Host Adapter	FireWire Direct	www.firewiredirect.com	\$79.95	2/1	Power Mac
 FireWire 800 1394b PCI CardBus Adapter	FireWire Direct	www.firewiredirect.com	\$79.95	2/1	PowerBook

XSERVING AMERICA

Apple Server Powers Massive Photojournalism Project

How do 50 editors weed through 2 million photographs submitted by 4,000 photojournalists—all to be edited into series of 53 coffee-table books? On Xserves, that's how.

It was all part of the *America 24/7* project (www.america24-7.com), where photojournalists from all fifty U.S. states spent one week photographing slices of American life. The first, a national issue, will be released in November this year. DK, part of the

Penguin Group, will publish one volume for each state (plus New York City and Washington, D.C.) simultaneously in October 2004.

Apple donated two Xserves and two Xserve RAIDs, as well as G4s, iMacs, and PowerBooks—so that the photographers could upload their images to an FTP site, where photo editors from top news organizations such as the Associated Press, the *New York Times*, and *Fortune* magazine could access them.—NR

AIEE! NO MORE IE!

Microsoft Discontinues Mac Browser Development

Apple has squeezed Microsoft out of the Mac browser business.

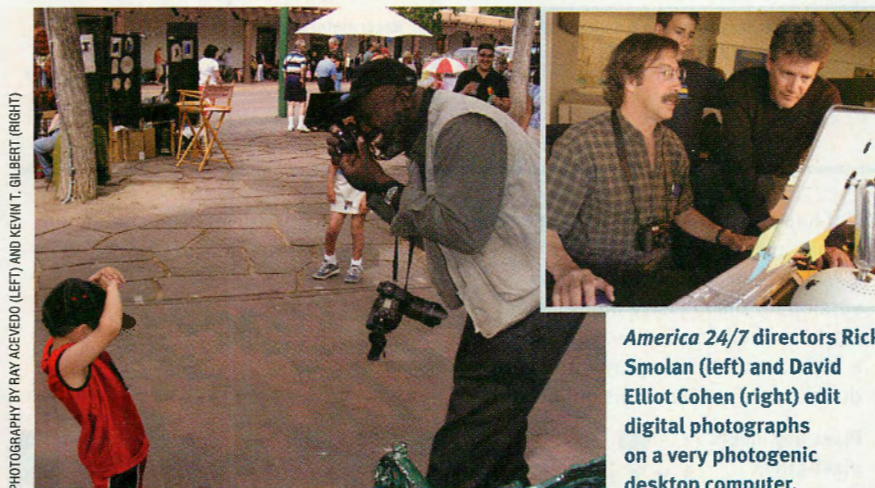
Microsoft's Mac Business Unit (www.mactopia.com) announced in June that it would discontinue development of Internet Explorer 6 for Mac because there are too many other competing Mac browsers—including Apple's Safari.

"Because Apple develops the operating system and Apple develops Safari, they can get into the operating system deeper and they can develop the features and functionality that meet the customer's needs," says Mac Business Unit product manager Jessica Sommer.

Microsoft will continue to support Internet Explorer 5 for Macintosh, and released a version 5.2.3 service update with security and performance enhancements in mid-June.—NR



So long, farewell,
auf Wiedersehen,
goodbye.



America 24/7 directors Rick Smolan (left) and David Elliot Cohen (right) edit digital photographs on a very photogenic desktop computer.

Photographer Eli Reed photographs a shy young guy in Santa Fe, New Mexico.

PHOTOGRAPHY BY RAY ACEVEDO (LEFT) AND KEVIN T. GILBERT (RIGHT)



ANIMAL DETENTION CENTER

Zoo Tycoon Makes Fortune from Helpless Fauna

In Aspyr's newest sim, you build, manage, and maintain a living zoo. Your goal is to make money by keeping your animals happy and your guests content. Once you entice Mom, Dad, and the kids into paying the entrance fee, you can gouge them further at food stands, gift shops, and petting zoos. You can choose from more than 375 animals, exhibits, and zoo buildings; hire zookeepers; and create appropriate



Run your own zoo in Zoo Tycoon.

animal habitats—all with no paralyzing smells. Be careful, though: Plant a tree too close to a monkey habitat, and escaped orangutans will terrorize your guests.

—Matt Osborn

Zoo Tycoon

Price	\$49.95
Available	July 2003
Aspyr	
www.aspyr.com	

LOOK, MA, MORE PRIMATES

Two Games Get Freeverse's Signature Burning Monkey Treatment



Freeverse adds zany monkeys to solitaire (left) and Mah Jong (middle and right).

This summer, Freeverse adds the ancient Chinese tile-matching game Mah Jong to its Burning Monkey suite of games. The goal: Pair matching tiles while mischievous monkeys either help you or taunt you.

Freeverse doesn't stop there. The third incarnation of the Burning Monkey Solitaire suite brings you

new games such as Dragon, Carpet, and Eliminator. You get more decks, cards, and monkey jokes than you can shake a banana at.—MO

Burning Monkey Mah Jong & Solitaire III

Price	\$19.95
Available	Summer 2003
Freeverse Software	
www.freeverse.com	

SIMS NEWS

The World of Sims Expands

The Sims, a god game where you control virtual people, is one of the most popular games in computer history. But what's next? God mods.

Simodifier lets you to edit traits, skills, careers, and relationships for all your Sims and pets.



Not happy with a child? Send him or her to military school.

While there's no word on a Mac version for the massive multiplayer world of The Sims Online, you can get a feel for online Sims play with There, due out in mid-2004. This online-only

Pixel-boy meets pixel-girl in the Sims-style MMO, There.



WHERE ARE MY FAVES?

Updates on Halo and Neverwinter Nights

Waiting sucks. Waiting for your favorite games to hit the Mac *really* sucks. The good news is that Halo and Neverwinter Nights are finally making their way to your Mac.

Halo, Bungie's revered first-person shooter, should be in stores by late summer 2003. The storyline will be faithful to the Xbox version, where you and your marines use guerilla warfare to survive on Halo, a mysterious ring-shaped world.



Neverwinter Nights brings D&D to the Mac.

While you're waiting, play the newly released Neverwinter Nights (or at least check out the demo). This Dungeons and Dragons role-playing game was the top-selling game in May 2003, the month it was released.—MO

Neverwinter Nights

Price	\$49.99
Available	Now
MacSoft	
www.macsoftgames.com	

Halo

Price	TBA
Available	Late Summer
MacSoft	
www.macsoftgames.com	

There

Price	TBA
Available	Mid-2004
There	
www.there.com	

Simodifier

Price	\$10
Available	Now
Lake Group Software	
www.lakegroupsoftware.com	



HACKERS UNITE

18th Annual MacHack Conference Rocks Michigan

Apple's Worldwide Developers Conference may be the most famous Macintosh developer conference, but this past June more than 100 rebellious developers gathered in Dearborn, Michigan, to craft the most unconventional software they could think up. The goal: to win the coveted Best Hack award at the legendary MacHack Conference (www.machack.com).

Attendees of the 18th annual MacHack overran the lobby of the Holiday Inn Fairlane, setting themselves up on PowerBooks and a strained wireless network. After 72 hours of continuous hacking, junk food devouring, and caffeine guzzling, the Hack Show began. Well past 4 a.m.,



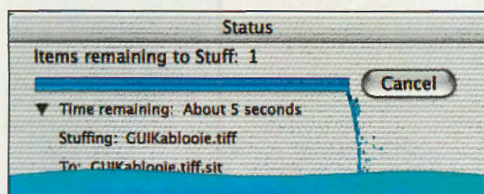
PHOTOGRAPH BY STEPHEN SWIFT

Rosyna Keller (right) and other developers work on their hacks.

water until the progress window is as useful as a virtual fish tank. "We were surprised at how well it went over," says Jon Gotow.

Air Pong by Paul Scandariato and Jon Johnson took second place. Written in two different development environments, Air Pong allows a group of networked computers to play a game of Pong across the screens of multiple machines.

Andrew Pontious and Mac Murrett won third place with GUI Kabloolie, a hack that turns the Finder into a game of Asteroids. The hack sends in a spaceship to shoot and obliterate icons and windows. (Thankfully, no actual documents get deleted.) You can order a CD with all fifty hacks, PowerPoint presentations, movies, pictures, and more from MacHack's Web site for \$19.95.—Stephen Swift



Unstoppable Progress floods your progress dialog.

overtired developers jeered and cheered as, one by one, participants showed off more than 50 hacks.

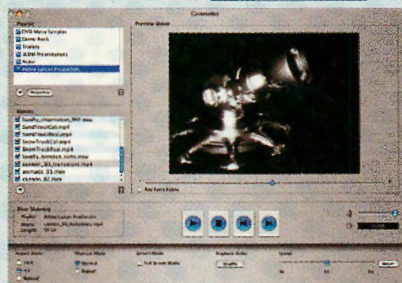
The clear winner, receiving twice the number of votes of any other hack, was Unstoppable Progress by father-and-son team Jon and Ben Gotow. It alters Mac OS X progress bars so that they leak

SHAREWARE PICK OF THE MONTH

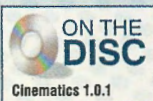
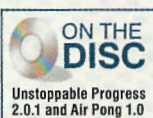
CINEMATICS

Einstein's Legacy www.einsteinslegacy.com \$24.99

If QuickTime can read them, Cinematics can organize and play them. This artful piece of shareware creates playlists for movies, which it plays in a 4:3 standard aspect ratio or 16:9 anamorphic style for widescreen movies—you can even speed up or slow down playback. Movie buffs can finally organize all those trailers on their drive, while business types can get a handle on all those presentations.—Andrew Tokuda



This is the video equivalent of iTunes—it organizes your movies into playlists.



866-MAC-XPRT
sales. service. certified.
powered by **JP Tech.com**

At approximately
11 a.m. on Monday,
June 23, 2003,
everything changed.

While delivering his keynote address at Apple's Worldwide Developers Conference, Steve Jobs smiled and said, "And there's one more thing"—his time-honored signal that he was about to announce something earth-shaking. Moments later, a powerful new era in Macintosh computing began.

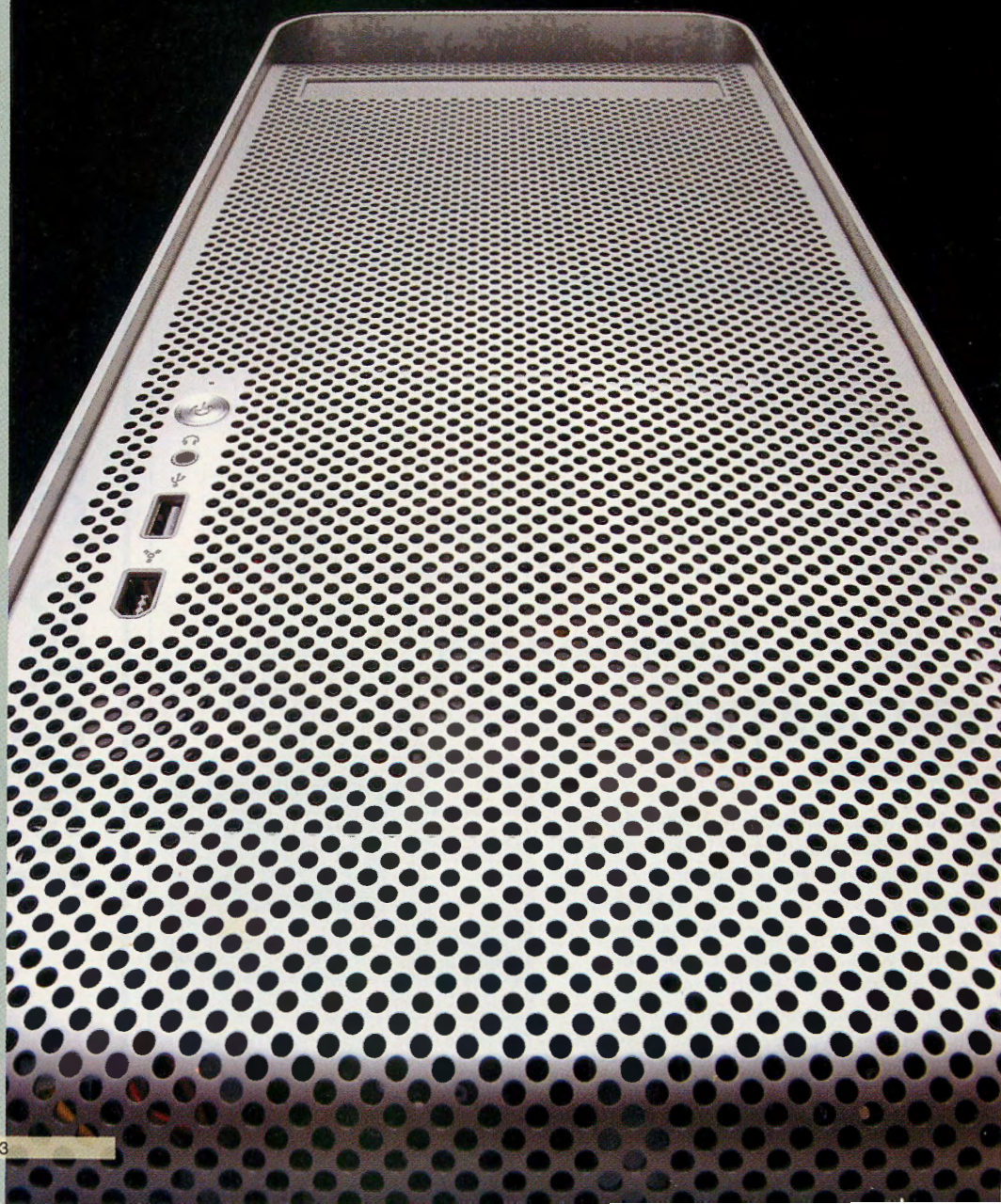
Yes, the new Power Mac G5 is that revolutionary. That important. That packed with potential.

The key word is *potential*. Yes, the Power Mac G5 will accelerate your existing software—in some cases more than double its performance, according to Apple—but this revolutionary machine's true power is yet untapped.

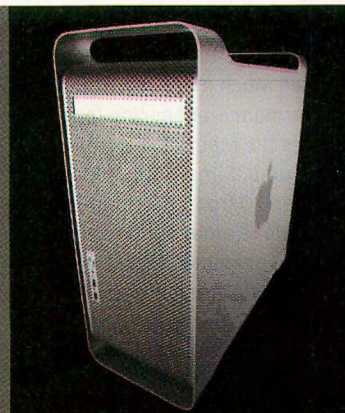
However, at this moment, an army of developers is busy tweaking, tuning, and refining their existing software—and creating brand-new apps—to take full advantage of the IBM PowerPC 970 processor, the heart of the new Power Mac G5. At the same time, Apple engineers are working on developer tools and Mac OS X upgrades that'll move us all from today's 32-bit G4 world to the 64-bit promise of the G5 (more on what that means in a bit).

Fasten your seat belts—the ride is about to become quite interesting. And much faster.

welcome to the future

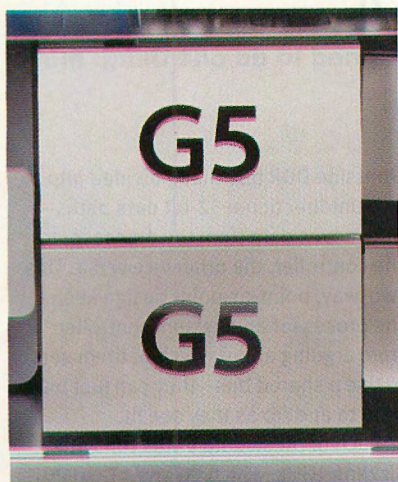


Not just a faster processor.
 An all-new processor.
 Not just a faster system.
 An all-new system.
 Not just a faster Mac.
 The world's fastest personal computer.



THE PROCESSOR

The IBM PowerPC 970 has more tricks up its sleeve than Siegfried and Roy combined.



In the past couple of years, we Mac users have worriedly watched as the processors in Windows boxes continued their inexorable climb to 3GHz and beyond. But we needn't have fretted—Apple's been busy. Not content to simply wait for Motorola (manufacturer of the G4) to get its corporate butt in gear, Apple bigwigs were secretly working with IBM to whip up an entirely new system built around an entirely new processor: the PowerPC 970.

Well, *entirely new* is not entirely correct. The 970 is based on IBM's time-tested, server-class POWER4 processor architecture. IBM engineers took those aspects of the POWER4 best suited to desktop computing and married them to their latest chip-making technology to create the PowerPC 970.

Like the POWER4, the PowerPC 970 is a 64-bit processor. The Motorola G4 (and the Pentium 4, for that matter) are 32-bit processors. This double-wide nature has two major advantages: extended memory addressing and wider data paths. Theoretically, a 64-bit processor can address over 18.4 exabytes of memory—an exabyte is a gigabyte *times* a gigabyte. (It goes, in ascending order: kilobyte, megabyte, gigabyte, terabyte, petabyte, exabyte.) A 32-bit processor can only address up to 4GB of RAM.

Note, though, that we said *theoretically*. In reality, a processor's

memory-addressing capability is defined by the physical size of its address registers—the areas in the processor where the locations of data in RAM are stored. The PowerPC 970's are 42, and not 64, bits wide. So the 970's actual maximum addressable memory is a “mere” 4.4 terabytes. Considering that you can only add up to 8GB of RAM to the new Power Mac G5, the PowerPC 970's 42-bit address registers are plenty wide—at least until Apple engineers stuff 512 times as many DIMMs into a Power Mac.

The more immediate benefits of the 970's 64-bit architecture are that it can move data and instructions in 64-bit-wide chunks and can both easily store and quickly manipulate 64-bit numbers and data. One caveat: In order to take total advantage of these and other 64-bit niceties, the 970 will need a 64-bit OS and 64-bit apps to chomp on. Even when Panther is released later this year, the Mac universe will remain a 32-bit place.

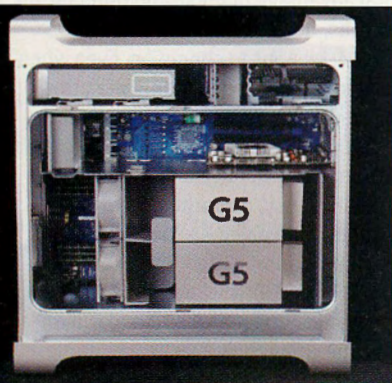
But worry not: The 970 runs 32-bit code natively at full processor speeds, with no messy, performance-draining emulation involved—a fact you'll especially appreciate if you lived through the 68K-to-PowerPC transition of the mid-'90s. A transition to full 64-bit computing, however, is inevitable—we're betting that 64-bit compilers will be available for Mac OS X sometime early next year, and maybe sooner.

by Rik Myslewski
 photography by Mark Madeo

Its 64-bit architecture is only a small part of what makes the PowerPC 970 a world-beater. Much more important is a pile of performance-enhancing features that demotes the Motorola G4 from champ to chump. Simply put, IBM has designed the 970 from the ground up to get a tremendous amount of work done in parallel. For example, it includes such niceties as a *hardware prefetch engine* to keep each of its dozen execution units—where the actual computing work gets done—working at full capacity.

The differences between the G4 and 970 execution units are striking: The G4 has a single floating-point unit—the execution unit that handles complex math; the 970 has two more-performant units. The G4 has a single integer unit—where simple number crunching occurs; the 970 has two. The G4 can handle two instructions per clock cycle; the 970 handles four. (Note to 970-savvy readers: Yeah, we know they both also dispatch one branch-prediction instruction per clock cycle—but if you think we're going to try to explain branch prediction here, you're out of your geeky gourds.) There's much more micromojito at work, of course, but it's too complex to get into right now.

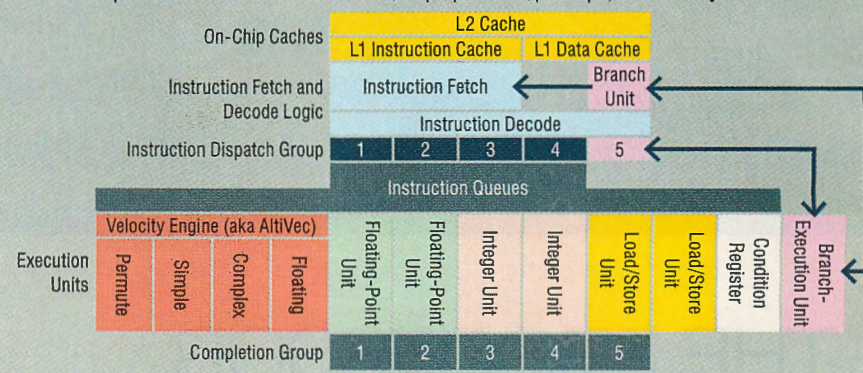
The situation's not all gravy—but is it ever? Since the G4 and the 970 are such different beasts, software developers must tweak their code not only to take advantage of the 970's power but also to remove G4-specific instructions and techniques that could cause the 970 to sputter, choke, or even—gasp!—crash. Expect some bumps in the road—but trust us, the journey will be worth it.



Say good-bye to the G4's hinged side door, and say hello to the fully removable G5 door.

Inside the PowerPC 970

Here's a very simple overview of the main components of the IBM PowerPC 970. If you're interested in a deeper look at this astonishing chip, download Apple's white paper, *PowerPC G5: The World's First 64-Bit Desktop Processor*, from www.apple.com/g5. If you're truly a glutton for geekitude, start with the 9xx 64-bit Microprocessors link on www.ibm.com/chips/products/powerpc, and knock yourself out.



THE SYSTEM

The Power Mac G5's system is designed to do one thing: move data fast. Very fast.

Look up *fast* in Sherlock's Dictionary channel, and—shockingly—you won't find *Power Mac G5* listed among the synonyms. That's inexcusable because the system architecture that underlies the G5 redefines the meaning of speed.

Let's compare the Dual 2GHz Power Mac G5 (the top-end model) to the Dual 1.42GHz Power Mac G4 (the previous top-end model). The most obvious difference is clock speed. But if we Mac addicts have learned anything in the past couple of years, it's that Megahertz Doesn't Matter—at least when comparing processors of significantly different design. And it's safe to say that the G5's IBM PowerPC 970 is significantly different—and significantly better—than the G4's Motorola 7445x.

Perhaps of equal importance to the 970's design superiority is the way the Dual 2GHz Power Mac G5's two 970s communicate with the rest of the system. Here's a closer look at the new-and-improved components of the system that contribute to making the G5 so freaking fast.

FRONTSIDE BUS Each 970 connects to the Power Mac G5's newly designed system controller over a 64-bit

frontside DDR bus that's divided into two unidirectional 32-bit data paths—one moves data from the processor to the controller, the other vice versa. This two-way, point-to-point design keeps the processor and system controller from arguing about which of them gets to use a shared bus—they can just blast data to and fro as they see fit.

Each of these data paths runs at a sizzling 1GHz, which means a Dual 2GHz Power Mac G5 has a total processor/controller bandwidth of 16 GBps. In comparison, a Dual 1.42GHz Power Mac G4 (in which both processors have to share the same 167MHz frontside bus) can only accomplish a comparatively wimpy 1.3 GBps. What's more, those two 970s use that same high-speed data path to access data in each other's caches, thus saving trips to RAM.

MEMORY The system controller accesses the G5's DDR SDRAM over a spiffy 400MHz, 128-bit memory bus that can simultaneously access two banks, each with four DIMMs, for a total of up to 8GB of RAM. (There's only one four-DIMM bank on the lowest-end, single 1.6GHz model.) Total memory bandwidth? A chunky 6.4 GBps. Total memory bandwidth of the 333MHz

The Specs

Got your credit card ready? Here are the different flavors of the Power Mac G5, which Apple promises will be available this August.

Processor	1.6GHz IBM PowerPC 970 (G5)	1.8GHz IBM PowerPC 970 (G5)	Dual 2GHz IBM PowerPC 970 (G5)
Frontside bus	800MHz	900MHz	1GHz
Standard memory	256MB	512MB	512MB
Maximum memory	4GB	8GB	8GB
Internal serial ATA drive	80GB	160GB	160GB
Optical drive	SuperDrive	SuperDrive	SuperDrive
PCI/PCI-X slots	three 33MHz PCI	one 133MHz, two 100MHz PCI-X	one 133MHz, two 100MHz PCI-X
Video card	nVidia GeForce FX 5200 Ultra	nVidia GeForce FX 5200 Ultra	ATI Radeon 9600 Pro
Price	\$1,999	\$2,399	\$2,999

All models include one FireWire 800 port, two FireWire 400 ports, three USB 2.0 ports, Gigabit Ethernet, V.92 modem, optical S/PDIF digital audio and analog audio in and out; all are Bluetooth and AirPort Extreme ready with Bluetooth and AirPort Extreme antenna ports.

64-bit DDR SDRAM on that so-last-week Power Mac G4? A loping 2.7 GBps.

By the way, great performance is due in part to the system controller's point-to-point communications with various subsystems—that is, they don't vie for bandwidth with the controller's communications with any other subsystems. Fast stavs fast.

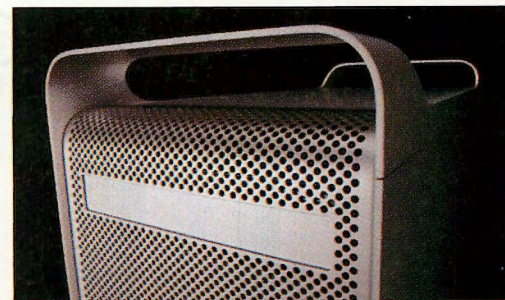
SLOTS The G5's system controller also handles communication with the Power Mac G5's AGP 8X Pro video card

slot, which handles data throughput at—surprise!—twice the speed of the Power Mac G4's AGP 4X slot. Even more impressive is the system controller's remaining client, the PCI-X controller, found in the 1.8GHz and Dual 2GHz models. (The 1.6GHz Power Mac G5 uses old-school PCI. Slacker.) In the Power Mac G5, the PCI-X controller supports one 64-bit/133MHz and two 64-bit/100MHz PCI-X slots, for a total maximum throughput hovering around 2 GBps. The PCI bandwidth of the Power Mac G4 and 1.6GHz Power Mac G5 lumber in at 266 MBps. Suddenly, *megabytes-per-second* sounds terribly old fashioned, doesn't it?

HARD DRIVES The I/O (input/output) controller—which shares the appropriately named HyperTransport interface with the PCI-X controller to talk to the system controller—connects to the internal hard drive using a connection scheme called Serial ATA (SATA). There are two individual SATA-150 channels, each capable of transferring 150 MBps to an SATA-150 drive. Add a second internal drive, and it enjoys its own, unshared connection with the I/O controller. In the Power Mac G4, there are two Parallel ATA (PATA) hard-drive busses: One shares 100 MBps and the other shares 66 MBps with up to two PATA drives each. Slower and more crowded.

OTHER I/O IMPROVEMENTS

Space prevents us from reveling in the many other niceties hanging from



The optical-drive door now slips down into the case.

the I/O controller—among others, FireWire 800 and 400, USB 2.0, Gigabit Ethernet, optional Bluetooth and AirPort wireless connectivity, analog audio in and out, and pro-level S/PDIF (Sony/Philips Digital Interface) digital audio in and out.

Power Mac G4 vs. Power Mac G5

The Power Mac G4 was—is—a fine machine, but in a spec-to-spec comparison, it's not worthy of washing the Power Mac G5's gym shorts.

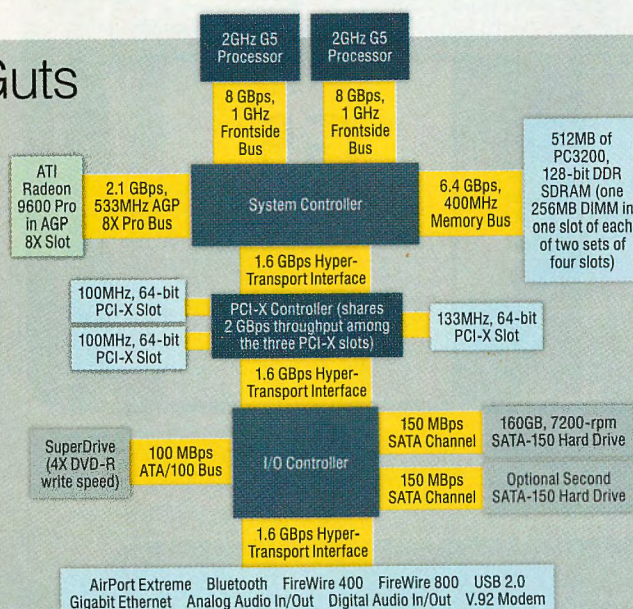
	Power Mac G4	Power Mac G5
PROCESSOR AND CACHES		
Processor	Motorola MPC745X	IBM PowerPC 970
Bits	32	64
Top clock speed	1.42GHz	2GHz
Instructions per clock cycle	2 + 1 branch	4 + 1 branch
Execution units	8	12
Maximum on-chip instructions	16	215
Cache line width	32 bytes	128 bytes
L1 instruction cache	32KB	64KB
L1 data cache	32KB	32KB
L2 cache	256KB	512KB
L3 cache	2MB	0
SYSTEM		
Data-bus width	64 bits	128 bits
Top bus speed	167MHz	1000MHz
Frontside-bus bandwidth	1.3 GBps total	8 GBps per processor
Memory bandwidth	2.7 GBps	6.4 GBps
Maximum RAM	2GB	8GB ¹
PCI slots	four 33MHz PCI	two 100MHz PCI-X, one 133MHz PCI-X ²
Video-card slot	AGP 4X	AGP 8X
Internal hard-drive busses	ATA/66, ATA/100 (parallel)	Serial ATA 150 (2 independent)
Internal optical drive bays	two ATA/33	one ATA/100
Size	17.0 by 8.9 by 18.4 inches	20.1 by 8.1 by 18.7 inches

¹ Maximum RAM of the 1.6GHz model is 4GB.

² The 1.6GHz model has three 33MHz PCI slots.

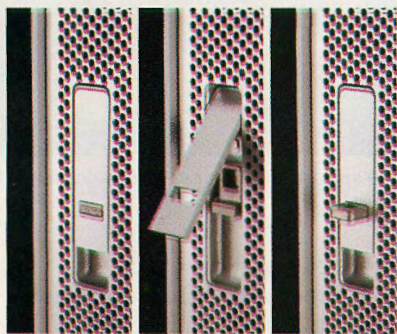
The G5's Guts and Glory

Sure, each of the Power Mac G5's major system components is fast on its own. But each component also communicates over high-speed interconnects with a system controller that's nimble enough to talk to them simultaneously and independently—a point-to-point scheme that keeps everything working at high efficiency. Here's a look at the Dual 2GHz G5 system architecture.



THE ENCLOSURE

Solid, silent, sexy, and simple to access—Power Mac enclosures just keep getting better.



A nifty new case latch includes a swiveling locking tab, giving you the option to add your own padlock.

The Power Mac G4 enclosure is a direct descendant of the venerable Blue-and-White Power Mac G3, which rightly earned its reputation as one of the finest personal computer enclosures ever designed. Sadly, though, time has passed it by. Today's advanced system architectures devour a lot of power, and power creates heat—which begs for new and more-creative ways of dispersing that heat without requiring howling turbines.

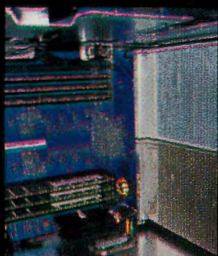
Well, Apple did get creative. Say good-bye to the old drop-down-door G4 case and hello to the new, four-chamber, multifan, taller and thinner Power Mac G5 enclosure. Apple designed this beauty from the bottom up to be sturdy and quiet,

and to provide easy, tool-free access to its user-serviceable components. Oh, yeah—it's also sexy as hell, in a Bauhaus sorta way.

The Power Mac G5's four major heat-producing subsystems—power supply, processors and RAM, PCI and graphics cards, and storage—are isolated from one another, from the bottom of the enclosure up. Each of these four chambers has its own self-adjusting fan or fans that take their spin-speed cues from a variety of sensing mechanisms. Even though there are a total of nine fans (eight for single-processor systems), the enclosure is as quiet as a kid who missed curfew sneaking home at 3 a.m. Apple claims that the enclosure is only half as loud as the latest, acoustically

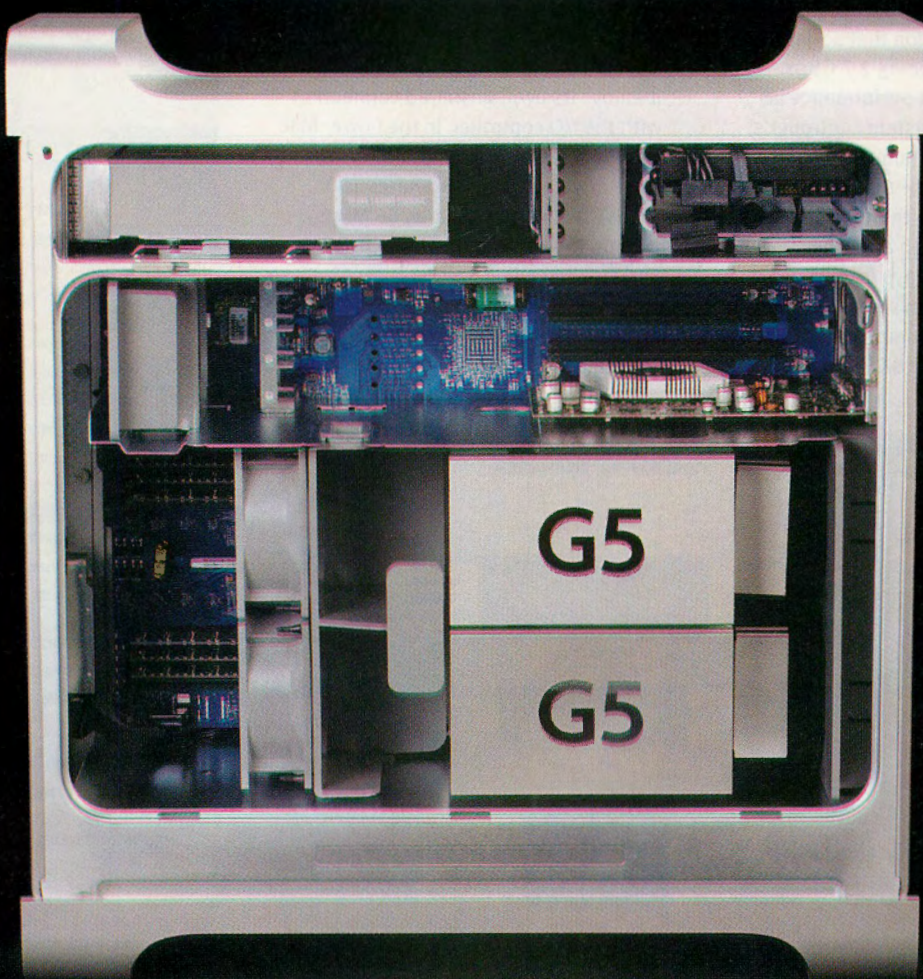
Playin' It Cool

The G5's case is divided into four thermally isolated zones, allowing for a quiet-but-effective cooling scheme that uses multiple, slow-moving fans. Three zones—processor and RAM, PCI and graphics cards, and drives—are easily accessible. The fourth, which houses the power supply, is not.



Massive RAM, Massive Heat Sinks

The two top G5 models have eight RAM slots, holding up to 8GB of DDR SDRAM. Each processor is kept cool by a massive multifan heat sink.



Look, Ma, No Tools!

All the G5's major components are designed to be easily user-serviceable—much more so than the G4. With the exception of a screwdriver to wrangle that single screw required by the PCI-card specification, no tools are required for servicing—even the SuperDrive is easy to replace.



All G5s Are Not Equal

See that ATI Radeon 9600 Pro card in the AGP 8X video slot? If this were a single-processor model, that'd be an nVidia GeForce FX 5200 Ultra card. Also, the 1.6GHz model has three 33MHz PCI slots, not three of the beefier 100/133MHz PCI-X variety.

improved Mirrored Drive Door enclosures—and at first listen, we heard no reason to doubt them. The reason is simple: Carefully moving just the right amount of air slowly and with minimal back pressure over thermally isolated components results in a quiet system. Here's another case (pun intended) in which finesse bests brute power.

Airflow is guided by a molded clear-plastic shield that's revealed when you remove the enclosure's aluminum side panel—which is, by the way, kept in place by a sturdy latch to which you can add your own padlock, should you want to dissuade people from helping their nefarious selves to your RAM and other system components. You can run the Power Mac G5 with the aluminum door off, but if you remove the clear plastic airflow guide, your Mac will go to sleep until you put it back.

The front of the enclosure is a cool-air-welcoming mesh; the back is also mesh, allowing hot air to puff gently out of the enclosure. The front also hosts the optical drive door (only one), the familiar power button, headphone jack, and (finally!) FireWire 400 and USB 2.0 ports. The back panel hosts all the usual suspects (see below, right), with two surprises: the aforementioned S/PDIF optical digital audio in and out, and a pair of antenna ports, one for Bluetooth



WARNING:
This Case Is
Not Designed
for Shredding
Parmesan!

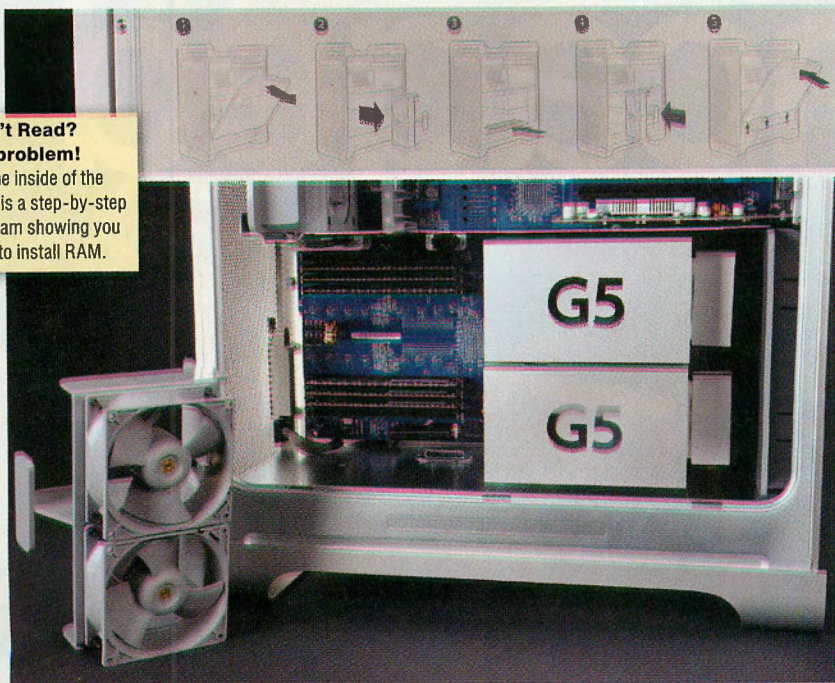
Moving a ton of air slowly and quietly is the *raison d'être* of the Power Mac G5's perforated anodized aluminum case. Visible through the front mesh are the processor and PCI/AGP fans; the rear panel houses two massive exhaust fans, the case latch, and a plethora of ports.

and one for AirPort Extreme.

So why antenna ports? Physics. Remember, the Power Mac G5 enclosure is made of anodized aluminum, and even the crafty engineers at Apple are unable to supersede the laws of electromagnetic radiation: Anodized aluminum blocks both Bluetooth and AirPort signals. ■

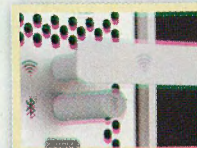
Can't Read?
No problem!

On the inside of the door is a step-by-step diagram showing you how to install RAM.



Finally!

The front panel now includes not only the power switch and headphone jack but also USB 2.0 and FireWire 400 ports.



Hello, World

AirPort Extreme (top) and Bluetooth require external antennas. Don't worry—they're small.



MacAddict editor in chief Rik Myslewski remembers attending the triple rollout of the Mac Classic, LC, and IIsi. He reports that although the Power Mac G5 announcement was more impressive, the food at the earlier event was better.



panther uncaged

by Cathy Lu and Narasu Rebbapragada

The cat's out of the bag. We take you on a guided tour of Apple's next and most refined feline: **Panther—Mac OS 10.3.**



THE DETAILS

Name	Panther
Version	10.3
Price	\$129
Availability	Before the end of 2003
System requirements	Not yet determined

Note: Our article is based on Apple's demonstrations using a preview version of Panther. Some features may change in the final version.

User-Friendly Finder

A Finder that Finally Makes Sense

Steve Jobs says the pre-Panther Finder is computer-centric. We agree. After all, how long did it take *you* to figure out that the Desktop folder was buried way over there in your Users folder?

Apple's goal with Panther was to make an OS that's *user-centric*—and it succeeded. It's more intuitive, and it's easier for you to get where you want to go. Some of the changes include a better-organized Finder window, faster search capabilities, the addition of an Action button, and the reemergence—bravo!—of Labels.

BONUS: You no longer have to navigate five levels deep to access a file in your Documents folder.

BUMMER: \$129 is a lot to pay for a more-intuitive interface (although you *do* get a few other cool features). Which economy is Apple living in?

Places Sidebar

You know how difficult it is in Jaguar to get to your Users folder? Well, no more. The new Finder's Places sidebar now gives you quicker access to the folders you actually use. Plus, it's customizable. Drag whatever file or folder you want into the left column for fast access—or drag it to the desktop to see it disappear with Mac OS X's trademark poof. You can even eject CDs and DVDs from this column by clicking the eject icon.

Action Button

Think of the Action button as the equivalent of a Control-click. Depending on what file or folder you have selected, the Action button leads you to different options, such as New Folder, Get Info, Move To Trash, and Open With. You can also label a file or folder by clicking the Action button.

Faster Search

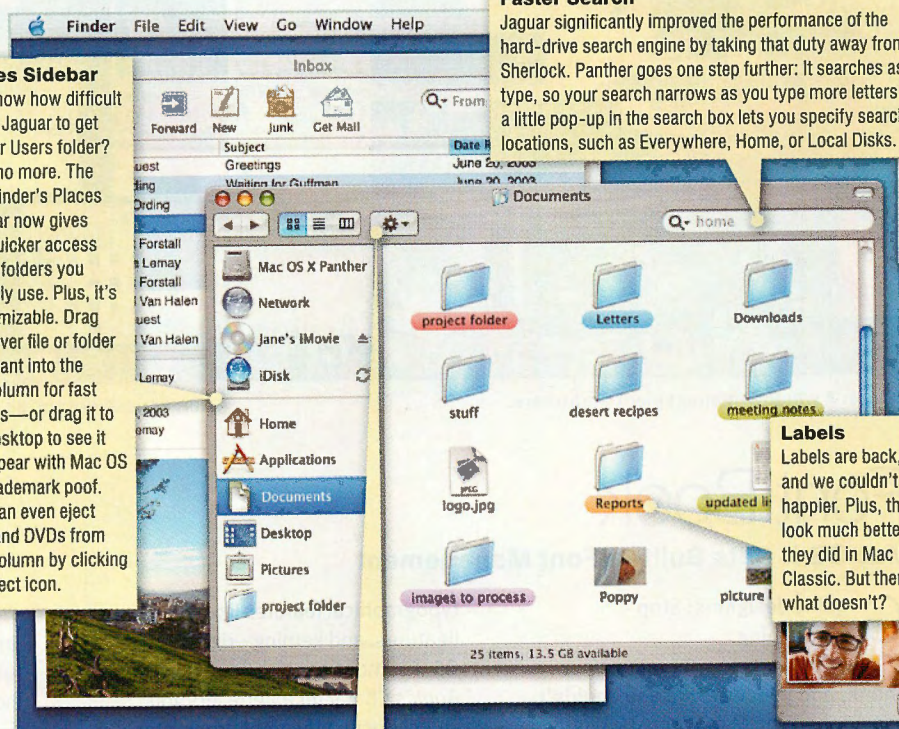
Jaguar significantly improved the performance of the hard-drive search engine by taking that duty away from Sherlock. Panther goes one step further: It searches as you type, so your search narrows as you type more letters. Plus, a little pop-up in the search box lets you specify search locations, such as Everywhere, Home, or Local Disks.

Labels

Labels are back, and we couldn't be happier. Plus, they look much better than they did in Mac OS Classic. But then, what doesn't?

Open and Save Dialogs

Apple has overhauled the Open and Save dialogs to look and act just like their big brother (or sister—we could never tell), the Finder. Everything that appears in your Finder's left column is available as a top-level location in Open and Save dialogs.



Exposé

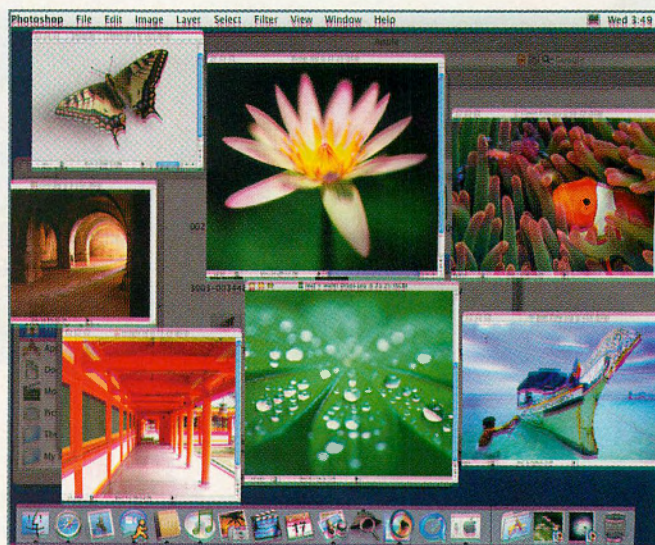
Smart Window Management

Exposé lets you use function keys, screen corners, and mouse keys to instantly scale and arrange open windows on your desktop. By default (at least for now—this could change), F9 scales all open windows so they're all visible and not overlapping; F10 organizes all windows in an active application in case, for example, you need to quickly view just the dozen Photoshop files you've got open; and F11 hides all windows, giving you quick access to your desktop to grab that file you need as an email attachment.

You can also set up Exposé so that dragging your mouse to different screen corners invokes these actions. Of course, this feature *could* get annoying when you're trying to access, say, the Apple menu in the upper-left corner, and Exposé kicks in instead.

BONUS: It's an absolutely brilliant way to sort through a cluttered desktop.

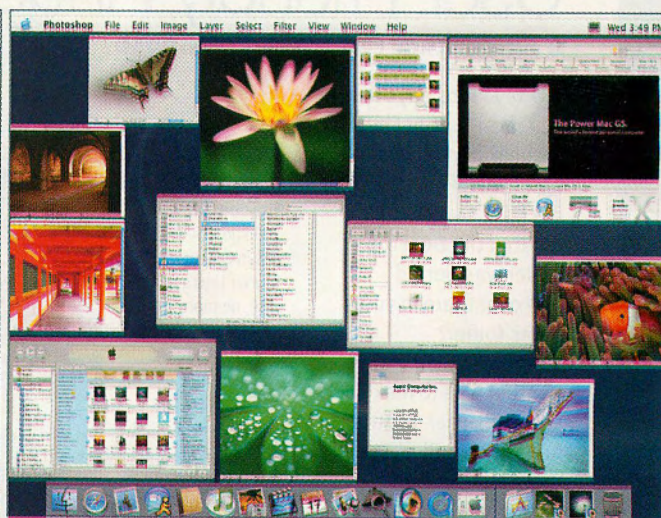
BUMMER: It encourages you to go crazy opening window after window. Screen-corner activation could be annoying.



With just one keystroke, you can make all the windows from one app appear in front of every other window.



Before: A window-management nightmare.



After: Exposé organizes all windows into nonoverlapping thumbnails.

Font Book

Mac OS X Gets Built-in Font Management

Graphic designers: Stop complaining.

You've whined to your mom, your shrink, and your dog that you couldn't use Adobe Type Manager (ATM) natively in Mac OS X. Now you don't need to.

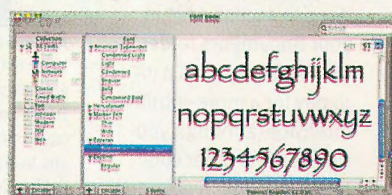
Double-click a font in the Finder, and Panther launches Font Book, its new font-management app that lets you view, install, group, enable, disable, and search for any and all fonts on your Mac. And that's just for starters. You also get access to advanced

typographical features like glyphs, ligatures, and kerning—right from the OS. For those special characters, Font Book's Character Palette lets you search for just the right arrow, star, or kanji character.

Don't, however, expect font repair capabilities as provided by FontAgent Pro (\$99.95, www.insidersoftware.com) or FontDoctor (\$69.99, <http://MorrisonSoftDesign.com>)—Apple has left some opportunities for increasingly marginalized third-party developers.

BONUS: It's about time Mac OS X included a proper font-management tool.

BUMMER: Font fetishists could spend hours using this app—and that's just sad.



Font Book lets you manage, uh, fonts. A welcome addition to Mac OS X.

Fast User Switching

Cool Effects for Multiple-User Macs

If you've got kids and a spouse (or multiple personalities), you've most likely set up more than one account on your Mac. Well, Panther makes it easier—and a hell of a lot more fun—to switch between users.

If you want to enable Fast User Switching, you can do so via the revamped Accounts pane. After that, just head to the upper-right corner of your screen, where there's a menu from which you can select different users—you no longer have to log out

or quit any apps. If you want it to, Panther will ask you for that user's password, then—using a 3D-cube spinning animation reminiscent of a Keynote transition—take you to the other user's desktop. Just like that.

BONUS: You can save a lot of time now that you don't have to log out or quit apps just to switch users.

BUMMER: You can waste a lot of that time watching the cool animation effect again and again.

User Menu

No longer do you have to log out to switch users. Just go to the user menu, choose the new user, and with a spinning-cube animation, your new desktop appears.

Judy Chin

Aki Shelton
Dan Talbert
Joslyn Smith
Judy Chin
Todd Taylor
Login Window...



Pixlet

Very Small, Very Fine Movies

What's a movie studio to do when it's got to pass around a three-minute video clip that eats up 43GB? Use Pixlet, Apple's brand-new video codec, to shrink it down to 14GB, that's what.

In close collaboration with Pixar, Panther includes a brand-new, high-quality video codec called Pixlet based on the advanced Wavelet video compression technology. (Get it? Pixar plus Wavelet equals Pixlet.)

According to Apple, Pixlet compresses video at a ratio of 20:1 to

25:1 at HD|2 resolution (HD|2 stands for half of high-definition, or 960 by 540 pixels). Apple says Pixlet will be a standard part of QuickTime and will play on any Mac running Panther—however, it isn't a consumer codec, so you won't be able to compress your iMovies with it.

BONUS: It's a great way for movie studios to squeeze the file size out of movie clips.

BUMMER: You can't compress your own movies with it—well, unless you work at Pixar.

Xcode

Writing Mac Software Just Got Easier

The release of the IBM PowerPC 970-based Power Mac G5 means that software developers have their work cut out for them. That's because the PowerPC 970, aka G5, is a very different beast from the Motorola MPC745x, aka G4 (see "Welcome to the Future," p20). Both developers and the compiler software they use to translate their code into the machine language a Mac understands need to keep in mind which chip they're creating their masterpieces for. Techniques that worked well on G4-targeted code could, for example, cause a G5 to stumble. Also, the G5 offers performance opportunities that G4 coders could only dream of.

To take full advantage of IBM's megachip, developers need to optimize and recompile G4 code. Also, since the Power Mac G5 is so freakin' fast, developers will be itching to create powerful new software for this powerful machine. Luckily, Apple is offering some help by including Xcode, its newly announced IDE (integrated development environment), with Panther.

Unless you're a coder yourself, you may never install Xcode on your Mac, let alone plumb its power. But trust us: It's got chops. For one, its user interface is much more intuitive than that of its predecessor, Project Builder, so developers can build apps more quickly. A new technology called Zero Link also promises to speed development by removing (sometimes) the time-consuming linking stage of compiling. Fix and Continue technology allows coders to debug an app while it's running—another big time saver—and Code Sense indexing and automatic code-completion make organizing large projects and tracking down the right code for the right instruction a hell of a lot easier.

Add the fact that developers can distribute compiling jobs over multiple Macs (thanks, Rendezvous); a much faster compiler (GCC 3.3, for you up-to-the-minute geeks); and a heap of other optimization features, and you can expect some way-cool software from some way-hot coders in the not-too-distant future. —Rik Myslewski

iChat AV

Smile, You're on iChat AV

Steve Jobs calls iChat AV “videoconferencing for the rest of us.” With a Webcam, microphone, or camcorder, you can literally talk to and see your online buddies in real time (well, minus some minor latency) via the wonders of instant messaging.

It's easy to set up. Just plug a FireWire video camera—like Apple's iSight (see our review, p54)—or USB audio recording device into your 600MHz-G3-or-better Mac, and Panther

configures it for iChat AV. Since you actually have to accept an invitation to a multimedia chat, you'll know whether someone's watching you.

If the Baby Bells were merely nervous before, they should be running in circles screaming right about now. iChat AV essentially lets you make unlimited phone calls for the price of your Internet connection—to a coworker down the hall or to your uncle in Warsaw. You need broadband for video, but Apple

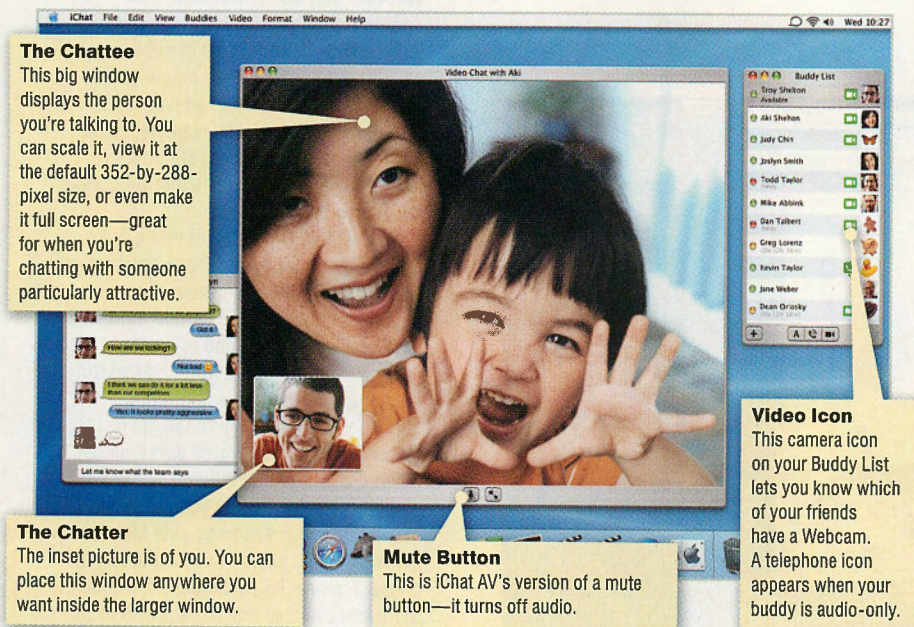


Apple's iSight is the perfect way to hook up visually with your online buddies.

says that a 56K modem suffices for audio chats. iChat AV is free for Panther users. Jaguar users can use the public beta for free (www.apple.com/ichat) until Panther is released, after which it will cost \$29.95.

BONUS: You get unlimited video and voice calls for the price of an Internet connection. It makes a perfect mirror for applying lipstick and checking for spinach in your teeth (no more running to the bathroom!).

BUMMER: You need to convince your friends and family to buy a Mac and a Webcam. It takes away from the silent privacy of instant messaging (no more gossiping about the boss!).



The Chattee

This big window displays the person you're talking to. You can scale it, view it at the default 352-by-288-pixel size, or even make it full screen—great for when you're chatting with someone particularly attractive.

The Chatter

The inset picture is of you. You can place this window anywhere you want inside the larger window.

Mute Button

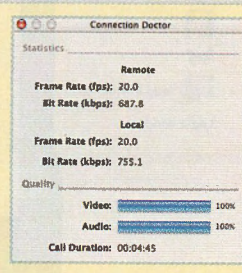
This is iChat AV's version of a mute button—it turns off audio.

Video Icon

This camera icon on your Buddy List lets you know which of your friends have a Webcam. A telephone icon appears when your buddy is audio-only.

Connection Doctor

This box (access it from the Video menu) shows you the strength of your connection; how long you've been chatting; and for stat geeks, the framerate and bit rate of your video streams on local access and remote networks.



Address Book

Slowly But Surely Becoming a Mature Contact Manager

In Jaguar, Address Book is a decent contact manager, especially when you consider its Mail, iChat, and iSync integration. In Panther, Address Book gets a little more robust. A little.

If you're planning on sending out wedding invitations, fliers to friends and family asking them to sponsor you in the latest AIDS ride, gleeful missives announcing your parole, or any other type of mass mailing, you'll love Address Book's new ability to print a group of addresses on a vast array of

standard Avery label templates.

Panther also grants you more address-formatting freedom. In Panther's Address Book Preferences, new options appear. Under Template, you can tweak the Address Book format so that it works better for you—for example, if you don't know anyone with a cell phone (yeah, right), you can simply remove that field. Also in Preferences, under Phone, you can set Address Book to automatically format phone numbers (right now, you have

to type in phone numbers the way you want them to appear—major pain in the you-know-what, and we don't mean your typing fingers).

BONUS: If you've ever had to do mass mailings, you'll be thankful for the label-printing feature. Template and phone-number customization are small-but-welcome tweaks.

BUMMER: It's still not as full-featured as apps like Entourage. It still doesn't play nice with Entourage—though Apple says that's Microsoft's fault.

Mail

Simple Brilliance in an Email Program

In Jaguar, Apple brought Mail to a new level of respectability by including an absolutely kick-ass junk-mail filter that puts other email apps to shame. Now, with Panther, Apple gives Mail even more lovin'.

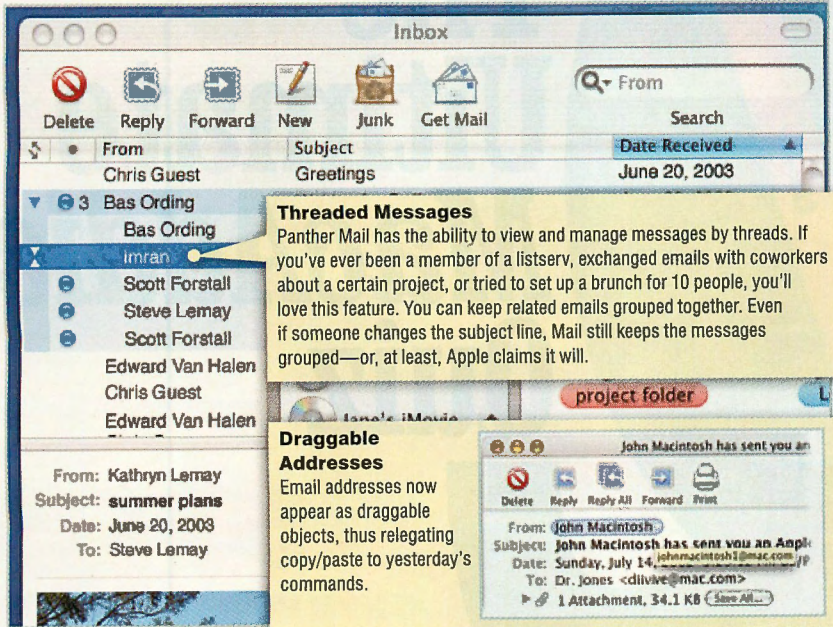
The best new Mail feature is the ability to view and manage messages by threads. By grouping emails of the same feather, Mail makes trying to follow an original email—and its 53 responses—much easier.

You know how it's kind of a pain to move around email addresses once you type them in? (Like when you decide to demote your boss from the To field to the Cc field?) Well, Panther Mail automatically turns any email address into an object that you can drag from one field to another or from one message to another. Also, if addressees have multiple email addresses, you can now click and hold their name in the To field to get a list of all their email addresses, along with options such as Edit Address and Add To Address Book.

Mail now uses the same HTML rendering engine that Safari uses, making HTML emails load faster and display more accurately. Lastly but certainly not least, Apple claims that the new Mail is much faster than previous versions when retrieving, sending, and searching. We like the sound of that.

BONUS: You'll love the ability to drag and drop addresses, as well as the power to view messages by threads.

BUMMER: It's still not as integrated as Microsoft's Office v. X mail and schedule wrangler, Entourage.



Other Features

Better Performance, More Security, and Greater Convenience

While Exposé, the new Finder, and iChat AV are surely Panther's hotshot features, Apple's new OS does offer a number of other, less-sexy—though not less-useful—features.

For those of you who still do business with faxers, Panther allows you to send a fax straight from the Print dialog—but we're doubting whether this feature will be as powerful as Smith Micro's long-lived stalwart, FAXstf X Pro (\$89.95, www.smithmicro.com). For those of you who deal with long PDF documents, Apple says Panther's Preview is much faster than before when displaying, scrolling through, and searching PDFs.


If you subscribe to .Mac, Panther displays your iDisk, along with all of its files, in its new Finder so you can work on any document stored on your iDisk just as if you were working from a folder on your desktop. What's more, if you have multiple Macs, your file will automatically synchronize with Apple's servers (if you have an active network connection), so your changes are immediately accessible when you access that same file from another Mac.

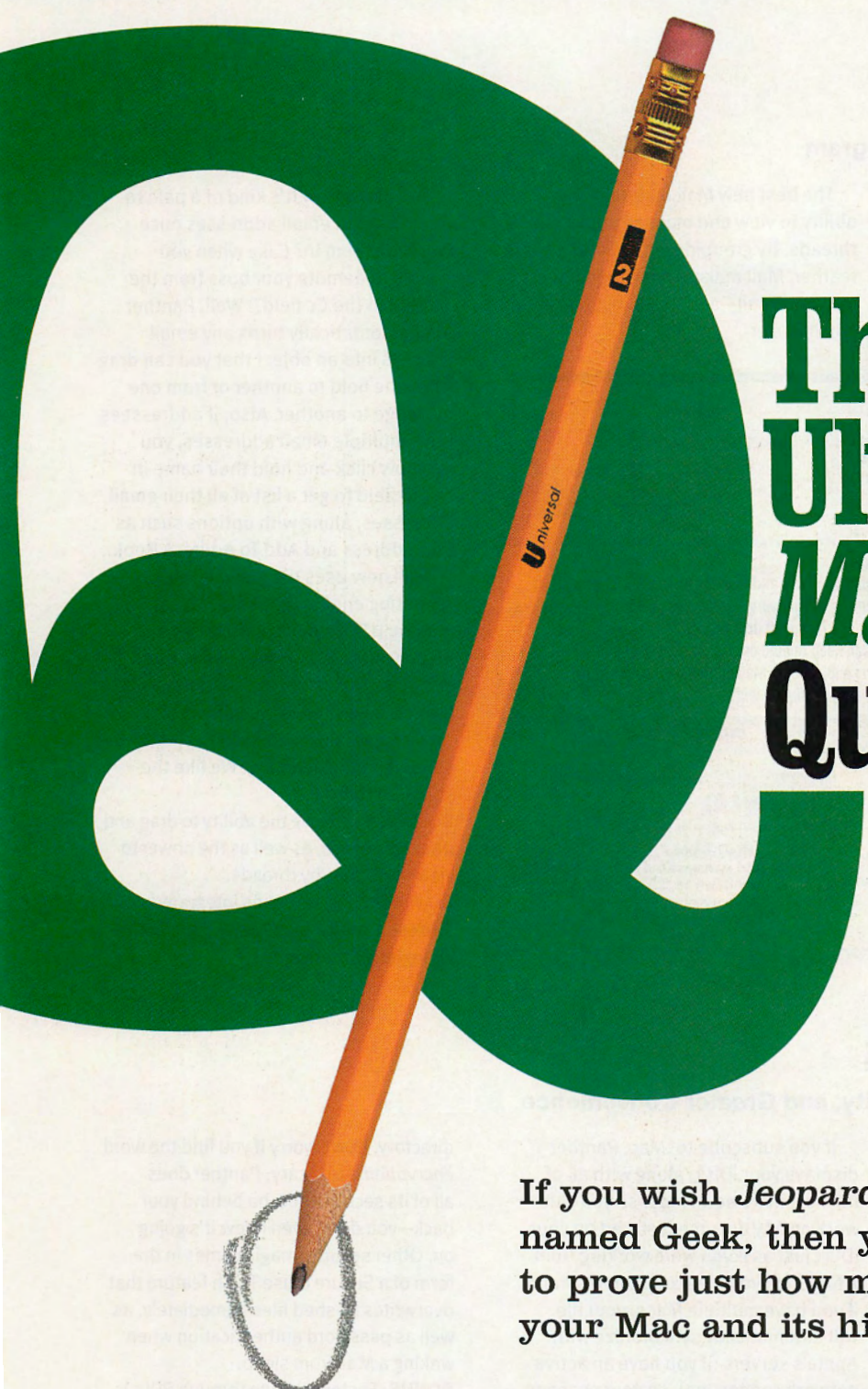
Finally, if you're worried about security, Panther offers FileVault, which uses AES (advanced encryption standard) to encrypt the contents of your home

directory. Don't worry if you find the word *encryption* a bit scary: Panther does all of its security hoo-ha behind your back—you don't even know it's going on. Other security magic comes in the form of a Secure Erase Trash feature that overwrites trashed files immediately, as well as password authentication when waking a Mac from sleep.

BONUS: Faster scrolling through PDFs is useful—if you look at a lot of PDFs. The iDisk feature is useful—if you have .Mac. FileVault is useful—if you're paranoid.

BUMMER: With faxing capability built into the OS, another third-party opportunity bites the dust...maybe. ■

 MacAddict editors Narasu Rebbapragada and Cathy Lu wonder who will play nicer—Jaguar or Panther.



The Ultimate *MacAddict* Quiz

If you wish *Jeopardy* had a category named Geek, then you're ready—ready to prove just how much you know about your Mac and its history.

In our second-annual geek quiz, we test your level of Mac addiction. From Apple history to current hardware, graphic design to games, we ask and challenge you to answer—correctly. Just like when you took your SATs (remember those?), you are not allowed any help—especially from that little bit of technology called the World Wide Web. Unlike the SATs, however, there's no time limit—and you can substitute a Number 2 pencil with your favorite ballpoint pen, fine-point Sharpie, or classic Burnt Sienna Crayola crayon. Now get crackin', and good luck!

by the **MacAddict** staff

photography by Mark Madeo
unless otherwise noted

1 Which of the following was an actual iMac pattern?

- a Green Clover
- b Pink Heart
- c Yellow Moon
- d Purple Horseshoe
- e Blue Dalmatian



Ruby was one iMac color. But the iMac also came in patterns.

2 What can Panther do that Jaguar can't?

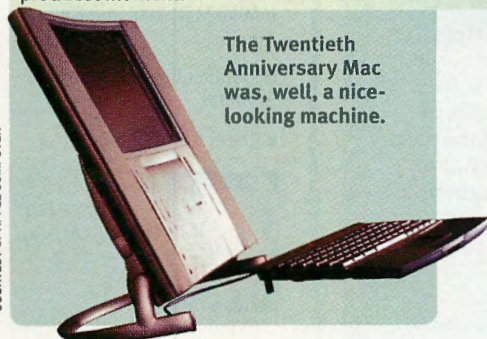
- a Run Quartz Extreme
- b Drive you nuts managing open windows
- c Run iChat AV
- d Secure your home folder on the fly
- e Run really fast and eat other mammals

3 What's true of NVRAM?

- a It stands for nonvariable random access memory.
- b It resets to the default settings every time you start up.
- c It remembers its contents when your Mac is shut down.
- d It only exists in PowerBooks.
- e It has really negative feelings toward PRAM.

4 What was true of the Twentieth Anniversary Mac?

- a It had a 200MHz PPC 603e processor.
- b Its code name was Caligula.
- c It came with 64MB of RAM, expandable to 512MB.
- d It had one PCI slot.
- e It was a great value for a computer and Apple's proudest moment.



The Twentieth Anniversary Mac was, well, a nice-looking machine.

What can—and can't—this puppy do?



11 What two things does AirPort Extreme *not* do?

- a Integrate with an 802.11b network
- b Operate in the 5GHz frequency
- c Work with the 17-inch PowerBook
- d Use the OFDM data-encoding standard
- e Do an ollie kickflip to a backside crooked grind on the wing of an F-15

5 What's the name of the little icon that accompanies a URL in Safari and some other Web browsers?

- a Webpict
- b Favicon
- c Urlicon
- d Thumbnail
- e L'il dude



Know what this little doohickey is called?

6 What does TFT stand for in display technology?

- a Thin Film Transistor
- b Thin Filament Transistor
- c Thermal Film Transistor
- d Either a or c
- e None of the above

7 Who was the Gaussian Blur filter named after?

- a Karl Friedrich Gauss
- b Helmut Gauss
- c Jean-Paul Gaussier
- d Marie Curie-Gaussier
- e Louis Gausset Jr.

8 On which open-source technology is Safari based?

- a Chimera
- b Mozilla
- c Gecko
- d KHTML
- e Zooropa

9 Which is an uncompressed audio format?

- a AIFF
- b WAV
- c MP3
- d a and b
- e a and c

10 Which of the following was never a section in MacAddict?

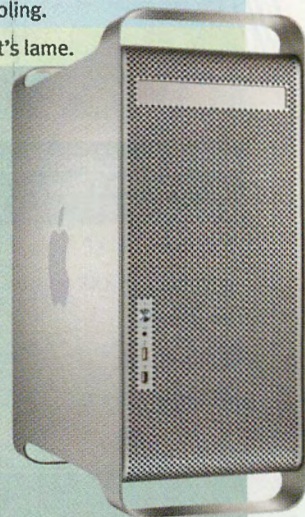
- a Cravings
- b Scrapbook
- c Powerplay
- d Kidz Stuff
- e Byte Me



We've changed our magazine over the years. Can you tell?

12 What's true of the new G5?

- a It uses an IBM chip with 75 million transistors.
- b It lets you add up to 16GB of RAM.
- c It has up to a 1.2GHz frontside bus.
- d It has up to nine fans for cooling.
- e It's lame.



Mmmmmmm... G5...

13 What notorious problem plagued the PowerBook 5300?

- a It weighed 15.8 pounds.
- b It cost \$6,500 when it first came out.
- c It had the potential to catch on fire.
- d It would go to sleep and never wake up.
- e It came installed with Windows instead of the Mac OS.

14 What is the native pixel resolution of most 17-inch LCD displays?

- a 1 by 1
- b 1,024 by 768
- c 1,280 by 960
- d 1,280 by 1,024
- e 1,600 by 1,200

If you know the native resolution of this 17-inch LCD, you're as bright as it is.

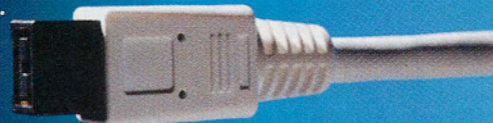


COURTESY OF APPLE COMPUTER

15 What was Photoshop called before it was Photoshop?

- a BarneyScan XP
- b Wilmascan XXX
- c Fast Eddy
- d ColorStudio
- e ClarisPhoto 1.0

How fast is FireWire 800 compared to the rest of the gang? You tell us.



16 From slowest to fastest, which order is correct?

- a USB 1.1, USB 2.0, FireWire 400, FireWire 800, Fibre Channel, Quark
- b Quark, FireWire 400, USB 1.1, Fibre Channel, FireWire 800, USB 2.0
- c USB 1.1, Quark, USB 2.0, FireWire 400, FireWire 800, Fibre Channel
- d Fibre Channel, Quark, USB 1.1, FireWire 400, USB 2.0, FireWire 800
- e Quark, USB 1.1, FireWire 400, USB 2.0, FireWire 800, Fibre Channel

17 What is OpenType?

- a A cross-platform typeface format that uses a single font file
- b A monospace font commonly used in the Terminal
- c An open-source typeface that's been tweaked by hundreds of designers over the years
- d A Mac OS X font format developed by Apple
- e Someone that tells you way too much on a first date

18 What is telecining?

- a Adding frames to convert 24-fps (frames per second) film to 29.97-fps video
- b Upsampling color in video from 16-bit to 24-bit
- c Converting video from NTSC to PAL format
- d Converting a video's aspect ratio from 16:9 to 4:3 for viewing on standard TV sets
- e Watching cross-country skiing on television

19 What does the Unix command `cat file name` do?

- a Display the contents of a file onscreen
- b List the contents of a directory
- c List files by a user-defined criteria
- d List the contents of your catalog
- e Meow and shed on furniture

A cat has meaning to a Unix user.



PHOTOGRAPH BY MARILYN DANCEL

20 AirPort Extreme offers a theoretical maximum of up to what speed?

- a 11 Mbps
- b 11 MBps
- c 54 Mbps
- d 54 MBps
- e Theoretical speeds, schmeoretical speeds. I only talk real-world.

21 Which Switcher saved Christmas?

- a Janie Porche
- b Ellen Feiss
- c Yo-Yo Ma
- d Gautam Godse
- e Cathy Lu Who



COURTESY OF APPLE COMPUTER

22 What did BHA, one of the Power Mac 7100's code names, stand for?

- a Butt Head Astronomer
- b Brilliantly Helpful Acronym
- c Big Honkin' Apple
- d Brave Happy Aardvark
- e Bold Hairy Armpit

23 Which two gentlemen were one-time presidents or CEOs of Apple?

- a Fred Anderson and Bud Tribble
- b Michael Spindler and Jef Raskin
- c Mike Markkula and Gil Amelio
- d John Sculley and Manfred Spindler
- e Cheech and Chong



Steve Jobs was preceded by a lot of, uh, interesting CEOs.

COURTESY OF APPLE COMPUTER; PHOTOGRAPH BY MOSHE BRAKHA

SCORE 0 TO 15: YOU ARE A

Cocoa Puff

If you don't equate IEEE-1394 with FireWire, Wi-Fi with AirPort, or DDR SDRAM with double data rate memory, my dear, you're a bona fide Cocoa Puff. It's OK—you're new to the world of Mac geekitude, and that's nothing to be ashamed of. In fact, we heartily welcome you aboard. For now, don't worry about how many questions you got wrong—just bone up on the answers and start your ascent to Classic User.



24 What was the name of the expansion slot in the very first iMac?

- a Balcony
- b NuBus
- c Power
- d Mezzanine
- e The Bill Gates Pre-Memorial Slot

Name the expansion slot in the iMac and move one step closer to Geekdom.



COURTESY OF APPLE COMPUTER

25 What's not true of the Mirrored Drive Door Power Mac G4's L3 cache?

- a It is double data rate SRAM.
- b It holds data from active applications.
- c It shares a bus with your system memory.
- d It speeds system performance.
- e It is one feature Mac geeks like to brag about to their PC foes.

28 In digital photography, what is EXIF?

- a Extra Image File
- b Exchangeable Image File
- c Executable Image File
- d Estimated Image File
- e All of the above



Digital photo pros know what EXIF means. Do you?

COURTESY OF CANON

26 What is Rendezvous?

- a Apple's technology for zero-configuration networking
- b Apple's technology for getting onto a Windows network
- c Apple's technology for sharing iTunes playlists across the Internet
- d Apple's technology for sharing Windows printers
- e Greg Proops's dating show

27 What was the name of the way-cheesy bar that used to be next door to Apple's Cupertino headquarters, where you could get hammered after work with your buddies while lounging around flaming pools of water?

- a TGI Friday's
- b The Halekulani
- c The Peppermill
- d Joe Versus the Volcano
- e Claris the Booze Cow's Udder Disaster

Next door there used to be a great place for off-duty Apple employees to booze it up (or at least smoke in the parking lot).



SCORE 16 TO 30: YOU ARE A

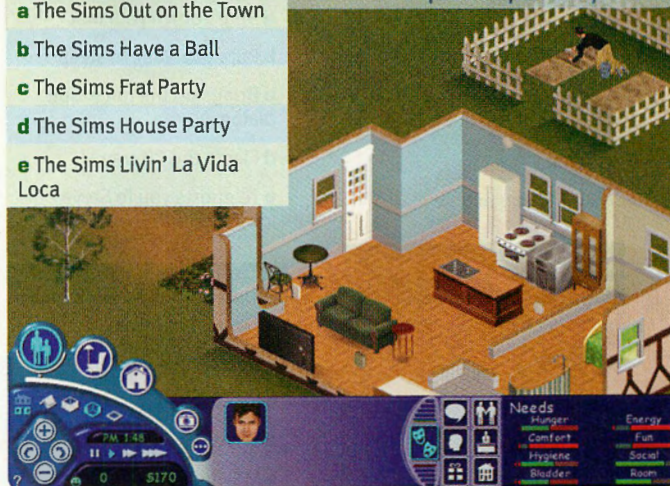
Classic User

You're no Cocoa Puff, but your Mac addiction runs only so deep. You're familiar with some Mac history. You remember the clone wars. You had no problem making the transition from Mac OS 9 to Mac OS X, but you still have no idea where to find the Terminal app—nor do you care. You've installed memory and the occasional PCI card, but you're a little fuzzy on why L3 cache is important and the difference between multitasking and multithreading. Read more *MacAddict*, and you'll get there.

29 Which of the following is a Sims expansion pack?

- a The Sims Out on the Town
- b The Sims Have a Ball
- c The Sims Frat Party
- d The Sims House Party
- e The Sims Livin' La Vida Loca

The Sims is the best-selling PC game of all time—and it's got the expansion packs to prove it.



30 Which of the following is not a symmetric encryption algorithm?

- a AES
- b 3DES
- c IDEA
- d RSA
- e Blowfish

32 Which of the following is a Mac-related term?

- a fsck
- b fido
- c arf
- d fubu
- e fcuk

31 What is Apple's high-end compositing software called?

- a Shake
- b Rattle
- c Roll
- d After Effects
- e Combustion

33 Which of the following two sports studs do not have their own game franchise on the Mac?

- a Tony Hawk
- b Kelly Slater
- c Kobe Bryant
- d Tiger Woods
- e Brian Boitano

What does areal density have to do with hard drives? Geeks know.



34 What is areal density?

- a How much data you currently have on your hard drive
- b How fast a hard drive spins
- c How quickly a hard drive can position the read-write head over a given area of a disk
- d How many bits of data a hard drive platter can store in a given space
- e The IQ of that incredibly stupid Disney-movie mermaid

35 What is VST?

- a An open audio-effect plug-in format
- b A networking protocol
- c A high-end motion-graphics file format
- d A 3G wireless data standard
- e An STD, but worse

36 Which celebrity was never in an Apple ad?

- a Kevin Costner
- b Yao Ming
- c Will Ferrell
- d Drew Carey
- e Chuck Berry

37 What does the key combination Command-Option-Eject do?

- a Shuts down your Mac
- b Puts your Mac to sleep
- c Brings up the force-quit dialog
- d Ejects the CD tray
- e Teleports you to Steve Jobs's hot tub

38 What is Y Yb Yr video?

- a Component video
- b Composite video
- c S-Video
- d RF video
- e MTV video

39 Two trains leave Chicago at the same time. Train A is carrying 24 gigabytes of information. Train B is carrying 33,554,432 bits of information. Train A arrives in Peoria 12 minutes before Train B, where Train A uploads one-third of its data and transfers the other two-thirds to Train B. An hour later, Train B departs for Dubuque. How much data, in megabytes, is Train B now carrying?

- a 16,032
- b 16,388
- c 24,004
- d 24,580
- e You guys are sick

There's something about a train that's magic.



40 Which early video game was Steve Wozniak credited with developing?

- a Breakout
- b Pong
- c Pac-Man
- d Crystal Quest
- e Grand Theft Auto, the Prequel



Before Woz founded Apple, he designed a very famous game.

41 What does it mean if a CPU is superscalar?

- a It has the ability to execute more than one instruction at the same time.
- b It has on-chip L1 and L2 caches.
- c It has no instruction-level parallelism.
- d It has a process size of 0.13µm or less.
- e It's related to either Tenzing Norgay or Sir Edmund Hillary.

42 What is the official name for AirPort Extreme's technology?

- a 802.11g
- b 802.11a
- c 802.11b
- d 802.11a + b
- e $802.11a(a+b)=802.11a^2+802.11ab$

43 What color has RGB values of 255 255 255?

- a White
- b Black
- c Red
- d Yellow
- e Puce

44 What is CUPS responsible for in Mac OS 10.2?

- a The built-in firewall
- b Active Directory authentication
- c Managing printers
- d Networking with Windows
- e Collecting any data that runneth over

SCORE 31 TO 45: YOU ARE A

Colonel Panic

Attention! Drop down, maggots, and give us 20 Unix commands, 10 shareware apps, and 5 Mac OS X hacks. If you can't deliver, then start running—you don't deserve to look Colonel Panic in the eye. If you can deliver, then consider yourself one of the few, the proud, the addicts. With a little more boot-camp training, we have no doubt that soon you'll be promoted to Terminal Geek—and you'll serve our nation well.



45 What was the name of the club of which Steve Wozniak was a member and which inspired him to build the Apple I?

- a Homebrew Computer Club
- b Computer Lovers Group
- c Menlo Park Computer Users Group
- d Gathering o' Geeks
- e Amateur Computer Club

46 Which is not a digital video format?

- a miniDV
- b DVCAM
- c DVCPRO
- d DigiBeta
- e DVate

47 What does Photoshop's Unsharp Mask do?

- a Sharpen
- b Unsharpen
- c Remove stray hairs
- d Deinterlace video images
- e Blur images of old people to make them look younger

48 Who created The Sims?

- a Will Wright
- b John Carmack
- c Sid Meier
- d Richard Garriott
- e Richard Simmons

49 Which two groups are not mentioned in the introductory commercial to Apple's Think Different ads?

- a The crazy ones
- b Those who march to the beat of their own drum
- c Those who have no respect for the status quo
- d The round pegs in the square holes
- e The brat pack

50 What is a raw image?

- a A digital photo before it's been tweaked in Photoshop
- b A 16-bit RGB color image
- c Unprocessed image data from a camera's CCD
- d An image that needs to be masked
- e A picture of sushi



SCORE 46 TO 60: YOU ARE A

Terminal Geek

You don't get out much, do you? That's all right. What's a little sunshine compared to the awe you inspire with your stone-cold knowledge of the Mac? You've jerry-rigged your Mac Classic into an MP3 jukebox running iTunes. Your Performa 6110 is now a 400MHz G3 that maintains itself completely on AppleScripts you wrote. Unix is your first language not your second. "Viva la geek!", you say—and so do we.

51 Which two are not types of memory cards?

- a XD
- b CFII
- c SPSS
- d MMC
- e LMNOP

52 Which MacAddict staffer would be least likely to crash Steve Jobs's Gulfstream V?

- a Kris Fong
- b Jenifer Morgan
- c Peter Marshutz
- d Niko Coucouvanis
- e Max



53 Which unit measures the brightness of an LCD display?

- a cd/m²
- b Nit
- c Watt
- d a and b
- e a and c

54 What does the Unix command `cd` stand for?

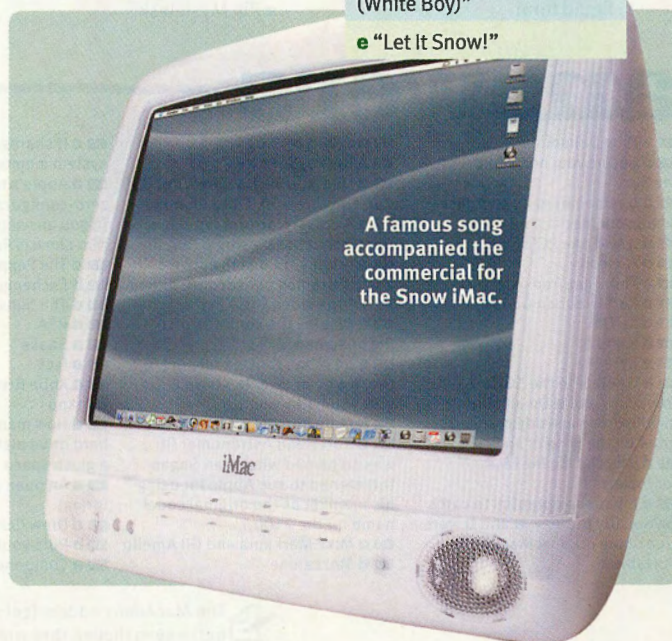
- a Copy disk
- b Count documents
- c Change directory
- d CD info
- e Change diaper

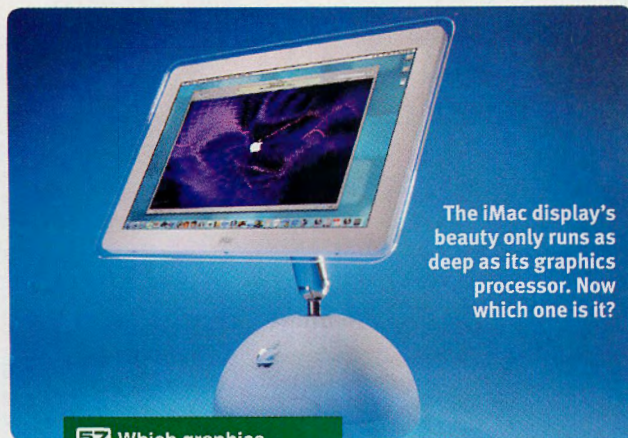
55 Who or what are Victoria, Fred, Zarvox, and Trinoids?

- a Sims characters
- b Mac project code names
- c Shareware apps
- d Mac OS default voices
- e The names of MacAddict editors' hard drives

56 Which song played during the commercial for the Snow iMac?

- a "White Wedding"
- b "White Room"
- c "Nights in White Satin"
- d "Play That Funky Music (White Boy)"
- e "Let It Snow!"





57 Which graphics processor drives all those pixels on a 17-inch iMac's screen?

- a nVidia GeForce2 MX
- b nVidia GeForce4 MX
- c nVidia GeForce4 Titanium
- d ATI Radeon 9000 Pro
- e Quest 650 Max ATV

58 What does SOAP stand for?

- a Simple Object Access Protocol
- b Simple Operational Access Protocol
- c Standard Object Access Protocol
- d Secure Object Access Protocol
- e A cleansing agent, manufactured in bars, granules, flakes, or liquid form

59 What does Samba allow you to do?

- a Run Unix commands in root mode
- b Share files with Windows and Unix machines
- c Check the status of your Ethernet ports
- d Ping other network nodes
- e Pick up sexy Latin singles

60 Which rock star wore a *MacAddict* T-shirt onstage?

- a Rick Nielsen
- b Rick Ocasek
- c Rick Springfield
- d Rick Astley
- e Rik Myslewski

ÜBERGEEK AMMO

In the eternal struggle of Mac vs. PC, the true Bull Geek understands that not only is it important to know oneself, but also one's enemy. To help arm you in your struggle against the dark side, here are five questions that focus on the IBM PowerPC 970 (aka G5—but if you're a geek, you knew that) and Intel's pencil-necked Pentium 4. Get all five correct and you've earned the title of Übergeek.

1 What's one feature that the IBM PowerPC 970 has that the Intel Pentium 4 doesn't?

- a Trace cache
- b Load/store unit
- c Independent vector unit
- d L1 instruction cache
- e The Big Unit

2 Which three execution units are part of the Vector Arithmetic Logic Unit in the 970's Pentium 4-spanning AltiVec implementation?

- a VPU, VCIU, VFPU
- b VSIU, VCIU, VFPU
- c VPU, VSIU, VFPU
- d VPU, VFPU, VACLU
- e VENI, VIDI, VICI

3 When does a Pentium 4 do no useful work?

- a During a pipeline drive stage
- b When installed in a peecee
- c When it's creating pups
- d During branch speculation
- e When renaming registers

4 How many more transistors does a 970 have than a Pentium 4?

- a 30,000
- b 300,000
- c 3,000,000
- d 33,000,000
- e Elebenty-many

5 Which two of the following pieces of advice should software developers keep in mind to ensure that their applications scream on the 970?

- a Trust in the power of the hardware prefetch engine
- b Implement microcode frequently to avoid pipeline bubbles
- c Take advantage of the dual double-precision FPUs
- d Wipe Cheetos dust from fingers before handling Developer CDs
- e Align hot loops and branches to 32-byte fetch boundaries

answers

- 1** e Blue Dalmatian
- 2** d Secure your home folder on the fly
- 3** c It remembers its contents when your Mac is shut down.
- 4** d It had one PCI slot.
- 5** b Favicon
- 6** a Thin Film Transistor
- 7** a Karl Friedrich Gauss
- 8** d KHTML
- 9** d a and b
- 10** e Byte Me
- 11** b Operate in the 5GHz frequency and e Do an ollie kickflip to a backside crooked grind on the wing of an F-15
- 12** d It has up to nine fans for cooling.
- 13** c It had the potential to catch on fire. (By the way, a and b were true of the original Macintosh Portable.)

- 14** d 1,280 by 1,024
- 15** a BarneyScan XP
- 16** e Quark, USB 1.1, FireWire, USB 2.0, FireWire 800, Fibre Channel
- 17** a A cross-platform typeface format that uses a single font file
- 18** a Adding frames to convert 24-fps (frames per second) film to 29.97-fps video
- 19** a Display the contents of a file onscreen
- 20** c 54 Mbps (but we respect those who answer e, so we'll give you half a point)
- 21** a Janie Porche
- 22** a Butt Head Astronomer (It was so named when Carl Sagan threatened to sue Apple for using his moniker as the original code name for the 7100.)
- 23** c Mike Markkula and Gil Amelio
- 24** d Mezzanine

- 25** c It shares a bus with your system memory.
- 26** a Apple's technology for zero-configuration networking (If you answered e, the name of that show is *Rendez-View!*)
- 27** c The Peppermill
- 28** b Exchangeable Image File
- 29** d The Sims House Party
- 30** d RSA
- 31** a Shake
- 32** a fsck
- 33** c Kobe Bryant and e Brian Boitano
- 34** d How many bits of data a hard drive platter can store in a given space
- 35** a An open audio-effect plug-in format
- 36** d Drew Carey
- 37** b Puts your Mac to sleep
- 38** a Component video

- 39** b 16,388 (There are 8 bits in a byte, 1024 bytes in a kilobyte, 1024 kilobytes in a megabyte, and 1024 megabytes in a gigabyte.)
- 40** a Breakout
- 41** a It has the ability to execute more than one set of instructions at the same time.
- 42** a 802.11g
- 43** a White
- 44** c Managing printers
- 45** a Homebrew Computer Club
- 46** e DVate
- 47** a Sharpen
- 48** a Will Wright
- 49** b Those who march to their own beat and e the brat pack
- 50** c Unprocessed image data from a camera's CCD
- 51** c SPSS and e LMNOP
- 52** b Jennifer Morgan (Our managing editor is a licensed pilot.)

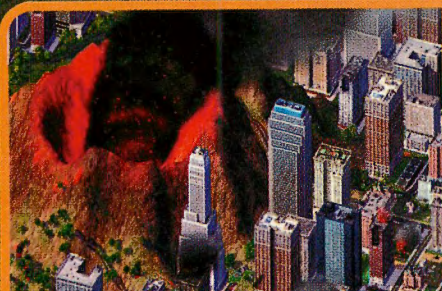
- 53** d a and b
- 54** c Change directory
- 55** d Mac OS default voices
- 56** b "White Room"
- 57** b nVidia GeForce4 MX
- 58** a Simple Object Access Protocol
- 59** b Share files with Windows and Unix machines
- 60** a Rick Nielsen (of Cheap Trick)

Answers to
ÜBERGEEK AMMO:
1 c Independent vector unit
2 b VSIU, VCIU, VFPU
3 a During a pipeline drive stage
4 c 3,000,000
5 b Implement microcode frequently to avoid pipeline bubbles and d Wipe Cheetos dust from fingers before handling Developer CDs



The *MacAddict* editors feel smarter after taking this year's quiz—even though they wrote it.

Play God. Play Mayor. Play With Your Sims.



Build and run the city of your dreams.



Create a world imagined only by you.



Immerse yourself in the lives of your Sims.



www.aspyr.com



ASPYR™

Authorized Electronic Arts™ Distributor

©2003 Electronic Arts Inc. Electronic Arts, SimCity, EA GAMES, the EA GAMES logo, Maxis and the Maxis logo are trademarks or registered trademarks of Electronic Arts Inc. in the U.S. and/or other countries. All rights reserved. EA GAMES™ and Maxis™ are Electronic Arts™ brands. Made in the U.S.A. The ratings icon is a registered trademark of the Interactive Digital Software Association. The Aspyr logo is a trademark of Aspyr Media, Inc. Mac and the Mac logo are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. All other trademarks and trade names are the property of their respective owners.

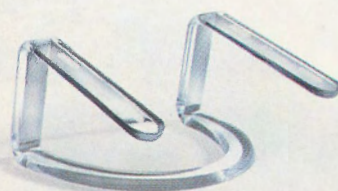
i wanna take you higher...



Elevate your notebook to create the perfect desktop

The iCurve - Invisible Laptop Stand is the key to replacing your desktop machine with a new notebook. It elevates your screen to a comfortable eye-level height. It raises the notebook off the desk - making room for a full-size keyboard and mouse. And it helps air circulate and keep your new 'hot' laptop cool.

Gain portability without sacrificing desktop comfort. Add an iCurve to your notebook and have the best of both worlds.



iCurve
Invisible Laptop Stand

JUST
\$39⁹⁹

EDITORS'
MacAddict
CHOICE



JUST
\$45⁰⁰

PowerMate USB Multimedia Controller

- Great volume & play button for iTunes
- Perfect jog/shuttle wheel to edit iMovies
- Programmable for any application
- Solid aluminum with blue glowing base

NEW



NOW
\$39⁹⁹

iMic USB Audio Interface

- Now includes recording software & audio cable - everything you need to record albums and tapes to make MP3s & CDs
- Plug-and-Play simple, no install required



ONLY
\$35⁰⁰

iTrip FM Transmitter for iPod

- Play your iPod through any FM radio station in your car, truck or boat
- iPod Powered - no battery necessary
- Fits perfectly on top - no dongle or cable

Now you have two **easy** ways to purchase your Griffin Technology product directly.

Order by phone at 615-399-7000 or **order online** at www.griffintechnology.com.

GRIFFIN TECHNOLOGY

ORDER NOW

www.griffintechnology.com

MacAddict RATED AWESOME	MacAddict RATED GREAT	MacAddict RATED SOLID	MacAddict RATED SO-SO	MacAddict RATED LOUSY
You'll be blown away.	You'll be impressed.	You'll be satisfied.	You'll be disappointed.	You'll be pissed off.

better living through smarter shopping

Apple's industrial-strength Xserve RAID, pictured here, is as fast and capacious as it is gorgeous. Other big deals this month include QuarkXPress 6 (too little, too late?), REALbasic 5.1 (REALbuggy?), Final Cut Pro 4 (can the best get any better?), and Harry Potter and the Chamber of Secrets (Flobberworm Mucous, anyone?). Plus, we've got a digital DJ setup called Final Scratch—a USB device that connects your Mac to two turntables (remember when those were called phonographs?), so you can mix and scratch MP3 songs. In the near future, we'll make our own music with the long-awaited release of Pro Tools for Mac OS X, and sleep easier, knowing that OS X-native disk utilities have finally arrived.

ThisMonth:

- 48 Amapi Designer 7 3D-modeling software
- 56 Auto Kit for iPod iPod car charger and preamp
- 52 C-740 Ultra Zoom 10x-zoom digital camera
- 44 Final Cut Pro 4 video-editing software
- 50 Final Scratch digital DJ setup
- 53 Harry Potter and the Chamber of Secrets action-adventure game
- 55 i70 Color Bubble Jet portable photo printer
- 56 iPodDock dock for first-gen iPods
- 54 iSight FireWire Webcam
- 56 I-Trigue i3350 2.1 speaker set
- 57 Medal of Honor Allied Assault: Spearhead game expansion pack
- 46 Painter 8 painting and drawing software
- 54 Pocket Digital instamatic digital camera
- 42 QuarkXPress 6 page-layout software
- 51 radial audio-looping software
- 49 REALbasic 5.1 software development environment
- 55 Reason 2.5 software sound studio
- 51 SoundSoap 1.1 noise-removing software
- 47 Xserve RAID server-class RAID array

PLUS:

TheHotList

- 58 The best of the best from recent reviews.



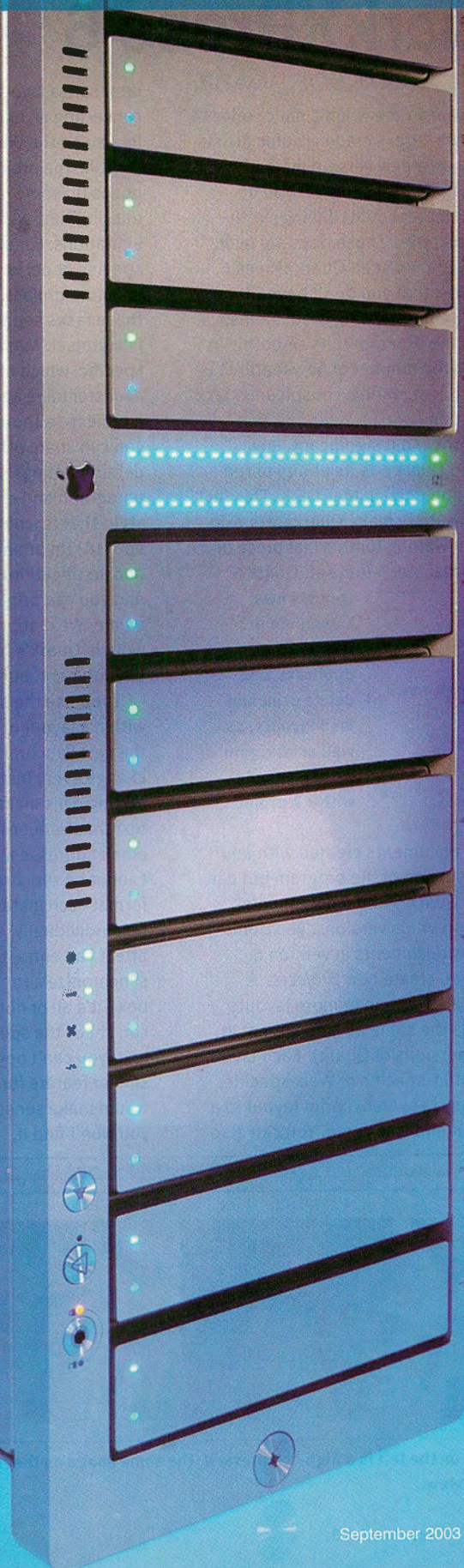
Compatible with
Mac OS X or later.



Compatible with
Mac OS 9 or earlier.



If we were
shopping for this
type of product,
this is the one
we'd buy.



QuarkXPress 6

PAGE-LAYOUT SOFTWARE

There was a time when a major release of QuarkXPress made graphic artists drool—when a new version meant lots of cool, new features that let you do amazing, unprecedented things with text and pictures. Those days are over. If you haven't yet seen QuarkXPress 6, rest assured that you don't have to worry about any embarrassing drool stains. Although the program runs smoothly in Mac OS X, the number of new features is modest at best, amid a conspicuous lack of innovation.

One of the most significant new features in Quark 6 is its ability to run natively (and only) in Mac OS X. This fact alone will satisfy many Quarksters who have been waiting for this last piece of the OS X designer's tool set. Quark 6



Quark's new Layout menu lets you add, duplicate, and delete print and Web layouts, as well as navigate among layouts within a project.

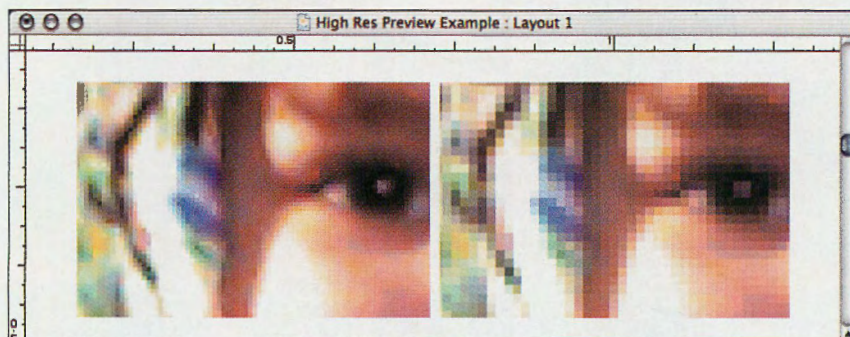
can open documents created with any previous version of the program but can save only Quark 5 and 6 documents.

Unlike previous versions, you don't create new *documents* in version 6. Instead, you create new *projects*. A project is a set of one or more layouts (a layout is the same as a document in previous versions of Quark). Each layout is either print-specific or Web-specific, but it's easy to switch a print layout to a Web layout and vice versa. You can also

duplicate a layout—an easy way to begin converting an existing print publication for use on the Web.

While the project layout structure opens up some interesting production possibilities, we were frustrated by its limitations. For example, you can't check spelling or perform a Find/Change across an entire project. You must perform these tasks separately for each layout in a project. Master pages are layout-specific, which means you can't share a master page among layouts within a project—although you can share other default settings such as paragraph and character style sheets, colors, and H&J (hyphenation and justification) styles, and you can print only one layout at a time. We'd appreciate the option to work in Quark's familiar one-document environment, but it's not there.

If you use the same text repeatedly within a layout or a project, you can use the new Synchronize Text feature to change every instance of that text when editing. This makes it easy to update text that frequently changes, such as email addresses. Formatting, however, cannot be synchronized. You must format each instance of synchronized text individually. Also, Synchronize Text affects an entire text box, so you can't synchronize a range of text within a box—it's all or nothing. And although you can check the spelling of synchronized text, you can't perform a Find/Change. A similar feature for synchronizing pictures would make sense and be useful, but you won't find it.



The image on the left is a high-res preview; the same image on the right is the default 72-dpi preview.

Quark 6 lets you keep a project's print and Web layouts close at hand.

We'll get more use out of Quark's new multiple undo and redo capabilities (left and middle) than its Web tools (right).



Version 6 adds multiple undo—at last. You can revert back to as many as 30 of your most recent actions, but the implementation isn't as robust as we'd like. For example, you still can't undo any actions performed with the Page Layout palette (formerly known as the Document Layout palette), nor can you undo Find/Change operations, ruler guide changes, or changes to preferences—to name a few. Sometimes you get a warning when an action cannot be undone, but not always.

Quark 6 lets you display high-res previews of imported pixel-based and vector images—you no longer have to print proofs to see exactly how text positioned relative to an imported picture will look in the final piece. This is a huge improvement over Quark's former 36- and 72-dpi previews, but the feature doesn't come in the box. According to



Project1: Print Layout

New icon, new terminology: Quark documents are now called projects.

Quark's Web site: "After you purchase QuarkXPress 6 and register online, you will receive an XTensions module that provides full-resolution preview of on-screen images." That's just lame.

Quark's new PDF export capabilities are a mixed bag. On the upside, they include the ability to add hyperlinks to indexes and lists, and to create bookmarks from lists. On the downside, you can export only PDF 1.3 files (Acrobat 4)—many of

the basic options available in Adobe Acrobat Distiller (such as default PDF job options like Screen, Press, Print, Standard, PDF/X, and so on) are not available, and you

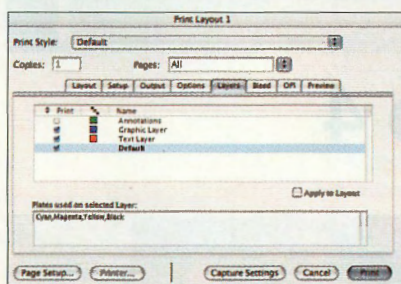
Thankfully we can synchronize text between a project's various layouts.

can't save PDF styles. Fortunately, you still have the option of linking Quark to Distiller to create PDFs. As for PDF import, you can import PDF 1.3 and 1.4 files, though transparency effects in imported PDF 1.4 files are not preserved (and there's no PDF 1.5 import).

Perhaps the biggest improvements in QuarkXPress 6 are in the area of Web publishing, which begs a couple of questions: How many of you use QuarkXPress for Web-page layout? Didn't think so. Have you been longing for more features that turn your high-end print publishing tool into a low-end Web publishing tool? Didn't think so. Still, the new Web features make it simple to create good-looking Web pages with flashy cascading menus and rollover actions.

Quark 6 handles tables better than previous versions, letting you link text cells and define the tabbing order of cells within a table. Another nice feature allows you to maintain a table's geometry (its overall height and width) when you add or remove rows and columns, and when you manually adjust gridlines. Noticeably absent is the ability to import formatted Word and Excel tables, and table-formatting options (such as adding fills and strokes to cells, rows, and columns) pale in comparison to the competition.

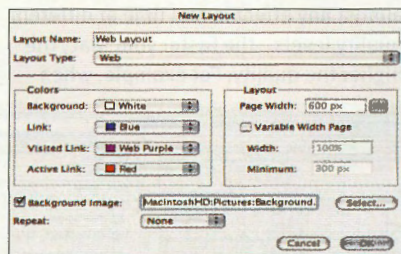
Perhaps as significant as the newly added features in QuarkXPress 6 are the features that are missing. The most glaring hole is transparency. There's no support for soft drop shadows,



The Print dialog's Layers tab gives you the option to print individual layers, and displays the names of the color plates that will be output for the selected layer.

feathering, blending modes, or opacity. Quark objects are either opaque or transparent, as they've always been.

If you've been holding your breath for some new typographic, page layout, or long-document features, you can exhale—but you won't be satisfied. Little if anything has been added to version 6 in these areas. Indeed, most of the



Quark gets the Web, as evidenced by new Web layout settings.



The Synchronized Text palette lets you use the same text repeatedly within one or more layouts. In this example, three text boxes in the print layout of a newsletter have been synchronized for use in the accompanying Web layout.

typographic-related dialogs and controls haven't changed much since version 3 (circa 1989).

We'll really miss our XTensions—all of those glorious third-party add-ons that add vital functionality to Quark must be retooled to work with the new version. If your workflow depends on a third-party XTension, you should contact the manufacturer directly to see if it will be updated for Quark 6.

It's impossible to evaluate Quark without mentioning the competition, specifically Adobe's InDesign 2. In a head-to-head feature comparison, InDesign 2 beats the pants off Quark 6, and the gap will undoubtedly widen when InDesign 3 is released.

If you like Quark 3, 4, or 5, you'll probably be satisfied—but not overjoyed—with version 6, which looks and feels a lot like its predecessors. While this continuity makes it easy for users of previous versions to learn Quark 6, it also draws attention to the sad fact that much of the app hasn't changed since the late 1980s.

Does this mean that QuarkXPress 6 is a lousy app? Not necessarily. After all, it's a lot like QuarkXPress 3, one of the most popular and successful graphics applications ever. Quark users who have simply been waiting for an OS X-native version of the program get their wish with version 6. But if you're growing tired of the same old typographic, page-layout, and long-document features, you owe it to yourself to check out the competition.

—John Cruise



COMPANY: Quark
CONTACT: 303-894-8888,
www.quark.com
PRICE: \$1045, \$199 to \$499 (upgrades)

REQUIREMENTS: G3, Mac OS
10.2 or later, 128MB RAM,
230MB disk space

GOOD NEWS: Runs well in Mac OS X (finally!).
High-res previews save mucho time.
BAD NEWS: New features are few and mostly minor.
Breaks third-party XTensions. Hardly worth the epic wait.

MacAddict RATED

SOLID



The best just got better. Version 4 does Final Cut proud.

we applied a Brightness filter, a widescreen crop, and a text overlay to a DV video clip, our Dual 1.25GHz Power Mac

G4 was able to play the video at High quality, whereas a 1GHz PowerBook Titanium had to throttle down to Medium quality to avoid skipping frames during playback. One slight letdown: Apple says that if your Mac is fast enough, it can render top-quality DV video in real time straight to tape. Our Dual 1.25GHz box, however, wasn't fast enough, even with single-filtered clips—hmm...do you think they knew the G5 was coming? You can, however, now play real-time renders of DV or Offline RT video on a TV monitor via a FireWire connection—in the past you had to render before outputting to a boob tube.

Some other slick upgrades: On the audio side, version 4 adds a true audio mixer that lets you set the levels of clips by dragging level faders up and down—in real time, as the clip plays. Color correction gets a boost too, thanks to a new a split-screen view that places different shots side by side, making it easier to match colors from one shot to another. If you work with keyframes a lot, you'll love the ability to set motion and filter keyframes directly in the Timeline instead of opening the Viewer window and working on a semi-disorienting time graph. Finally, you can now vary any clip's playback speed—for example, you can smoothly transition from 100 percent speed to slow motion and back again. But beware: Mastering this feature requires studying lots of charts and graphs in Apple's docs—a terrifying prospect if you still bear the scars of high school algebra (or was it geometry?).

But Final Cut's posse of stand-alone apps is the real star, giving you key features you'd normally find only in third-party apps—*expensive* third-party apps. Soundtrack works a lot like the popular Windows app, Acid Music (\$69.97, www.sonicfoundry.com), letting you load up any QuickTime video and then compose the video's score by arranging prerecorded music loops in time. You

Final Cut Pro 4

VIDEO-EDITING SOFTWARE

Video editors rejoice: Final Cut Pro 4 is here. Not only does version 4 build well on Final Cut's strong foundation, it also includes four new stand-alone applications that, combined with other enhancements, expand Final Cut's scope to include the whole post-production enchilada.

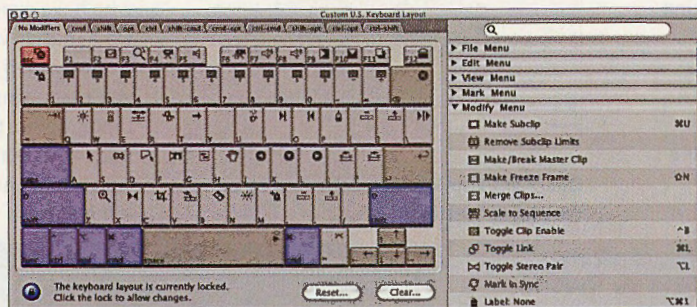
While much of Final Cut 4's wow factor comes from its four new sidekick apps, the main app sports plenty of new frills. One of the biggest additions is the ability to customize Final Cut's interface to the hilt—big news for editors making the switch from Avid systems. For starters, you can set the height of each Timeline track separately. For example, you can now make your music track huge so you can scrutinize its audio waveform, but leave all the other tracks normal size. That's just a warm-up, though: A simple Custom Keyboard dialog lets you assign any Final Cut command its own keyboard shortcut. You can also turn any command into an icon, and add that icon to any major window so it's just a click away. What's more, you can save your custom interfaces and



This animated title took all of two minutes to create using Final Cut's new titling app.

use whichever one best suits the kind of work you're doing.

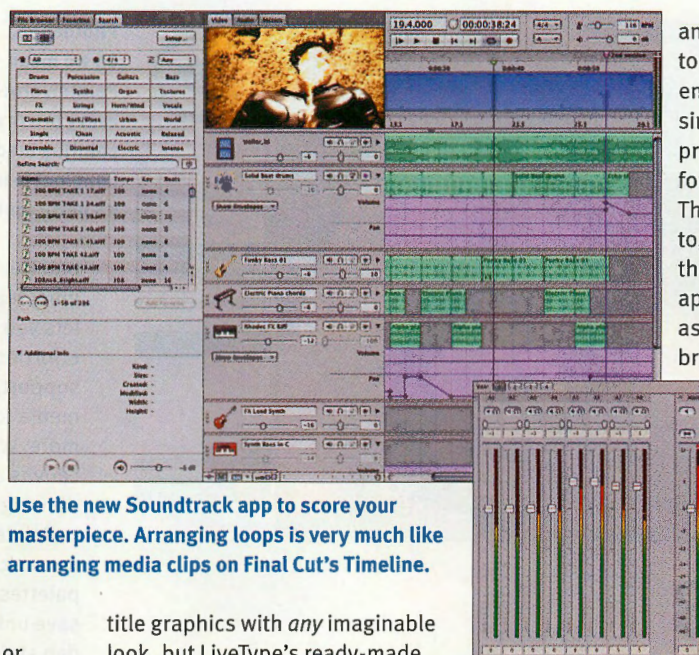
Apple also souped-up Final Cut's real-time rendering. You can render almost any effect in real time at different quality levels—the faster your Mac, the higher the quality. For example, when



Pick any function from Final Cut's menus (right), and then drag it to the key of your choice (left). Instant keyboard shortcut!

get a library of 4,000 royalty-free loops, and can add any of the bazillion Acid-compatible loops available on sites such as www.4musicminds.com, www.acidfanatic.com, and www.acidplanet.com. When you're done, you can export the whole shebang back to Final Cut as a stereo-mixed AIFF file, or export each of your score's tracks as a separate AIFF so you can mix each instrument into your Final Cut movie. Soundtrack's interface is a bit clunky and has a few crash-inducing bugs, but in general it works great. Thanks to lots of tastefully done loops (drums, synthesizers, guitars, strings, and so on), Soundtrack is ideal for scoring quick patches of music to support title sequences or talking-head interviews—think sports shows, corporate videos, and infomercials.

Another new app is LiveType, an excellent tool for creating animated title graphics. You can design your type using any TrueType or PostScript font, or try one of LiveType's 27 pre-animated fonts—though many are a bit too cartoony for our supercool tastes. You also get hundreds of animated textures and objects to use as background graphics, and they are generally so well done you're bound to find something that suits your style. But the big deal about LiveType is how it customizes type: Beyond the expected leading and tracking controls, you can also design your own glows, outlines, and shadows with near-Photoshop precision. Things get really interesting when you apply a few of the 150-plus animated effects (bounces, rotations, moving glows, color cycles and lots more), tweak the individual parameters that make up each effect, and apply multiple-layer effects. With patience, you can create type graphics that rival the work of Adobe's After Effects (\$699). Of course, After Effects still reigns supreme if you want

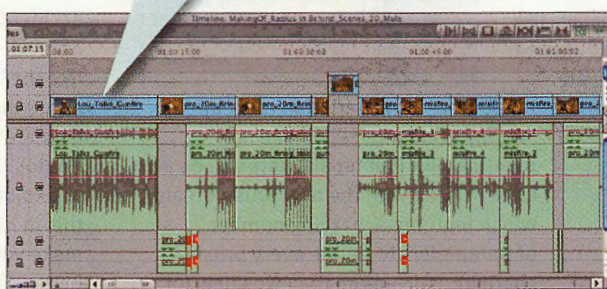


Use the new Soundtrack app to score your masterpiece. Arranging loops is very much like arranging media clips on Final Cut's Timeline.

title graphics with any imaginable look, but LiveType's ready-made building blocks, which you can mix and match and tweak to the nth degree, are a good substitute for many jobs.

Another stand-in for a more-powerful third-party app is Final Cut's new Compressor app, which works a lot like Discreet's Cleaner 6 (\$549, www.discreet.com). It batch-encodes your Final Cut or QuickTime movies into other digital formats—MPEG-2 for DVD, MPEG-4 streams for posting on the Web,

Final Cut Pro's improved Timeline lets you zoom in on individual tracks to scrutinize audio waveforms or video frames.



and so on. You don't have to know a thing about encoding to use Compressor, since it's stuffed with predetermined settings for all possible formats. That said, if you want to, you can tweak any of the settings yourself or apply effect filters such as gamma correction, or brightness and contrast.

The only noteworthy drawbacks are that Compressor encodes only to QuickTime (no Real or Windows Media formats—we don't care, but you might) and, unlike Cleaner, it doesn't use the superior Sorenson 3 Pro codec for its two-pass variable bit rate (VBR) encoding. However, Compressor provides much better results

than QuickTime MPEG-2 codec does.

Finally, as if three new apps weren't enough, Final Cut now also includes CinemaTools, an app for folks editing video that originated on film, and who will ultimately go back to film via negative cutting. Apple used to sell CinemaTools alone for \$999, now it's standard equipment. Such a deal.

All of these additions make Final Cut Pro 4 infinitely hotter than version 3—the only question is whether its extra horsepower is worth your cold, hard cash. Those shopping for a new video editor should rest easy, since Final Cut's \$999 price makes it the best all-around value you'll find. If

you're sticking to pure editing, the \$399 upgrade is exciting but a bit pricey. If you're an editor or filmmaker who wants to control more post-production work yourself—including music scoring, title creation, and final output—then you should jump all over this one.

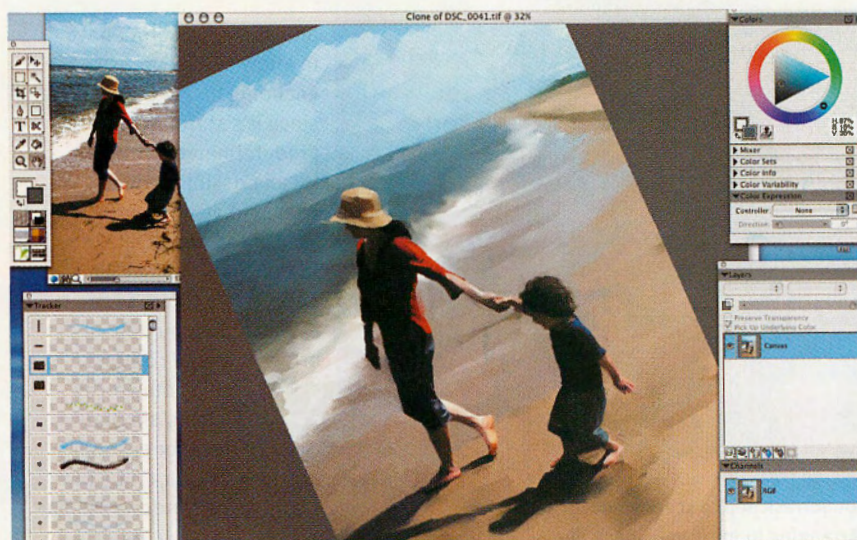
—Helmut Kobler

COMPANY: Apple
CONTACT: 800-795-1000 or 408-996-1010, www.apple.com
PRICE: \$999, \$399 (upgrade)

REQUIREMENTS: 350MHz G4 (500MHz recommended), Mac OS 10.2.5, 384MB RAM (512MB required for real-time rendering), 15GB disk space, DVD-ROM drive

GOOD NEWS: Improved real-time rendering. Audio, titling, and compression apps. Customizable interface.
BAD NEWS: No more online help database (online PDF manuals only). Minor bugs in new companion apps.

MacAddict RATED
AWESOME



Photoshop, er, we mean Painter, stocks every brush and painting medium imaginable into its hefty toolbox.

cared to know) what to do with.

Also new is the Mixer palette, which allows you to mix together paints to blend colors virtually—a nifty feature if you're used to painting with a

palette. You also get multiple undo, a great feature called Sketch Effect that lets you turn photos into pencil sketches effortlessly, serious Wacom tablet support, various paper and surface media to paint on, and a whole lot more. We were even able to tilt the canvas at an angle, as we do when drawing on paper.

Painter 8 felt like a good upgrade until we noticed a major omission: custom palettes. In previous versions, we could save unlimited brush variants, textures, dab styles, almost anything—a real plus if we needed to keep a similar visual style throughout our project. The feature has essentially been reduced to the new Tracker palette, which simply saves the last 25 brush variants you've used. This might be fine for dabblers, but we hope Corel rethinks this omission in version 8.1 for the sake of its pro users.

Other grumbles: Real-time previews of scaling and rotation would be nice, and the clone box should remain checked when changing brushes—it seems redundant to have to keep checking this when you're cloning (essentially repainting in natural-media style) from a source image. It would also be nice if the app supported LZW TIFF files, since many working professionals choose to save in this format.

If you try to use everything Painter has to offer, your head might explode. For those who already risk that unhappy accident by using an older version, this upgrade is somewhat tepid. While we like the improved interface, one might argue that if it ain't broke, don't fix it. If you're new to Painter, its likeness to Photoshop may give you more incentive to explore its unique features. Just keep this in mind: Painter won't necessarily make you a good painter—but it may help.—Steven Parke

Painter 8

PAINTING AND DRAWING SOFTWARE

Whether you create images for a living or just for fun, you'll have a ball using Painter 8, a natural-media painting and drawing program that gives you the experience of working with drippy, crumbly, and gloppy media, but without the mess. The manual is the size of a Stephen King novel, so if you read it first, you may never get around to producing your masterpiece. Then again, if you know your way around Adobe Photoshop, you may not need to read it—well, not much of it, anyway.

Painter 8 is like Painter 7 in Photoshop's clothing: gone is its confusing interface. The new window layout will be familiar to Adobeans, as will applying filters, masking, and making selections. Plus, Painter 8 is faster than previous versions. In Mac OS X, Painter's performance flies—no more hang-ups like those we experienced with earlier versions. Of course, our 1.5GB of RAM helped, no doubt. Corel recommends that you

quit all other apps before using Painter, and we agree—it's a RAM piggy.

Painter does an excellent job of replicating the look of real media, including oil, watercolor, crayon, charcoal, pencil, ink, and pastels. Over 400 brushes feature enough

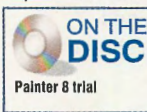


Left: The Tracing Paper feature lets you cheat your way to creating great sketches.

Right: The new Mixer feature let us blend paints bit by bit, just like we would on a real paint palette.



randomness and variation to create "happy accidents"—just like real painting. But Painter also lets you be a control freak with the new Brush Creator, which features a dizzying number of parameters to define every brush characteristic—more than we knew (or



COMPANY: Corel
CONTACT: 800-772-6735,
www.corel.com
PRICE: \$299, \$149 (upgrade)

REQUIREMENTS: G3, Mac OS
9.2.2 or 10.2 or later, 128MB RAM,
1,024-by-768-pixel display resolution,
Wacom tablet recommended

GOOD NEWS: Easy-to-use interface—if you're familiar with Adobe products. Fast performance on powerful, RAM-loaded machines. Incredibly full-featured.
BAD NEWS: Memory hog. Custom user palettes are gone.

MacAddict RATED
●●●●●
SOLID



Xserve RAID

SERVER-CLASS RAID ARRAY

We're blown away. From its well-thought-out architecture to its slick administrative software, everything about the Xserve RAID purrs quality, value, and style. If you're looking for a huge amount of easily managed, highly robust storage for your company network or creative workgroup, this is the RAID array for you.

How huge is it? Way huge. At the low end, a 4-drive Xserve RAID provides 720GB worth of 7200-rpm ATA/100 storage. The big, 14-drive fella, like the one we tested, measures a full 2.5TB.

These are the maximum capacities of each unit, however, and not necessarily their capacity when the supplied RAID Admin software has grouped their drives into *RAID sets*. Space prevents a full discussion of RAID here (for more info, download Apple's Xserve RAID Technology Overview from www.apple.com/xserve/raid). Simply put, RAID combines hard drives in ways that make the whole greater than the sum of its parts. Some RAID sets offer speed, some offer reliability, and some offer both.

After we hauled our 110-pound test unit out of its easy-open crate and muscled it onto our test bench, we installed its included

dual-port Fibre Channel PCI card into our Dual 1.33GHz Xserve, then attached the two supplied Fibre Channel cables—one each to the Xserve RAID's dual controller modules. At a guaranteed 2 GBps per channel, Fibre Channel eats FireWire 800's lunch.

After loading the included management software onto the Xserve, we fired up the surprisingly quiet Xserve RAID, launched RAID Admin, and told it to configure the Xserve RAID based on Apple's default: two 7-drive RAID 5 sets, each managed by a separate controller. Setting up a RAID set is usually a complex task—but

Apple wraps a humongous, bodacious storage system that solves all your high-end storage needs in a package that's both versatile and easy to manage.

it's a two-click process with RAID Admin, and testing each drive and building the set can take place in the background while you're using the Xserve RAID. This process, however, is time consuming—our build took 24 hours.

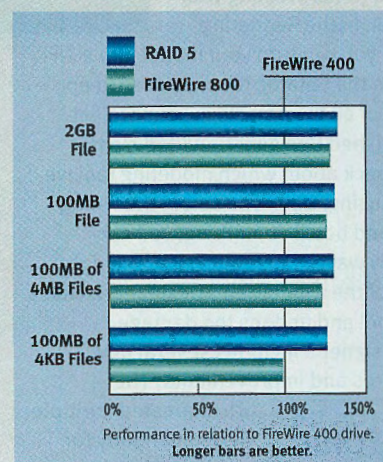
Next, we tested our two 1.01TB RAID 5 sets by transferring big and small files to and from the Xserve (see "Righteous RAID," below). The Xserve RAID didn't even break a sweat. Performance was even faster—a lot faster—when we transferred files from one RAID set to the other. Frankly, however, the MacAddict lab simply doesn't have the dozens of machines required to fully thrash the Xserve RAID, and our parent company wouldn't lend us the entire corporate network for full-bore testing. Killjoys.

That said, we did learn enough from our testing—and from reconfiguring the Xserve RAID to high-speed RAID 50 and retesting—to confidently state that this is one awesome piece of hardware. And don't let the price fool you: In the rarified strata of corporate-class storage, the Xserve RAID is more than reasonably priced—it's downright dirt-cheap. So why are IT managers still buying RAID arrays from Dell, HP, Sun, and others? You tell us, and we'll both know.—Rik Myslewski

RIGHTEOUS RAID

We pitted the Xserve RAID, configured as two RAID 5 sets, against a fast FireWire 800 drive—the 7200-rpm Other World Computing Mercury Elite Pro—in both FireWire 400 and 800 mode. When combining the read and write performance of different file sizes, the Xserve RAID was faster than the FireWire 800 drive, and quite a bit faster than the FireWire 400 reference drive. Remember, though, that the Xserve RAID is designed to remain fast even when serving multiple clients—a capability not shared by an external FireWire drive.

We used a Dual 1.42GHz Power Mac G4 running Mac OS 10.2.4 for our FireWire 400 and 800 testing, and a Dual 1.33GHz Xserve running Mac OS X Server 10.2.4 for our Xserve RAID testing.



COMPANY: Apple
CONTACT: 800-692-7753, www.apple.com
PRICE: \$5,999 (4 drives), \$7,999 (7 drives), \$10,999 (14 drives)

REQUIREMENTS: PCI-equipped Power Mac, Mac OS 10.2 or later

GOOD NEWS: Astonishingly well designed and well built. Powerful, easy-to-use admin software. Fast.

BAD NEWS: Doesn't come with a free set of Ginsu knives. That's about it. Really.

MacAddict RATED

AWESOME

Amapi Designer 7

3D-MODELING SOFTWARE

Steve Martin's gripe about the French ("They have a different word for *everything!*") also seems to apply to 3D software. Every 3D program available uses a different interface—a situation that's often bewildering to newbies.

Amapi Designer 7's interface—while alien at first—is easy to get used to. Intended primarily for modeling, Designer organizes the model-creation process into *rooms*, or interface windows, in which you perform different functions. The interface lacks Mac-like elements such as tabs or panels, but as long as other design companies are making up their own interface concepts, we won't fault Eovia for doing the same. The good news is that those who have previous iterations of Designer have the option to use the application's old interface as well as the new.

Designer's three main rooms are Modeling, Rendering, and Catalog—the Modeling room is where you spend the bulk of your time, creating your model. In the Rendering room you can turn your model into a TIFF, and in the Catalog room you can keep track of all the objects in your project. We wished Designer provided clearer feedback about which modeling tool we were using, but if you select the wrong tool and botch something, you can simply wave your mouse over the right side of the window and Designer releases the tool and undoes the damage.

Designer 7 includes several new features and improvements. The

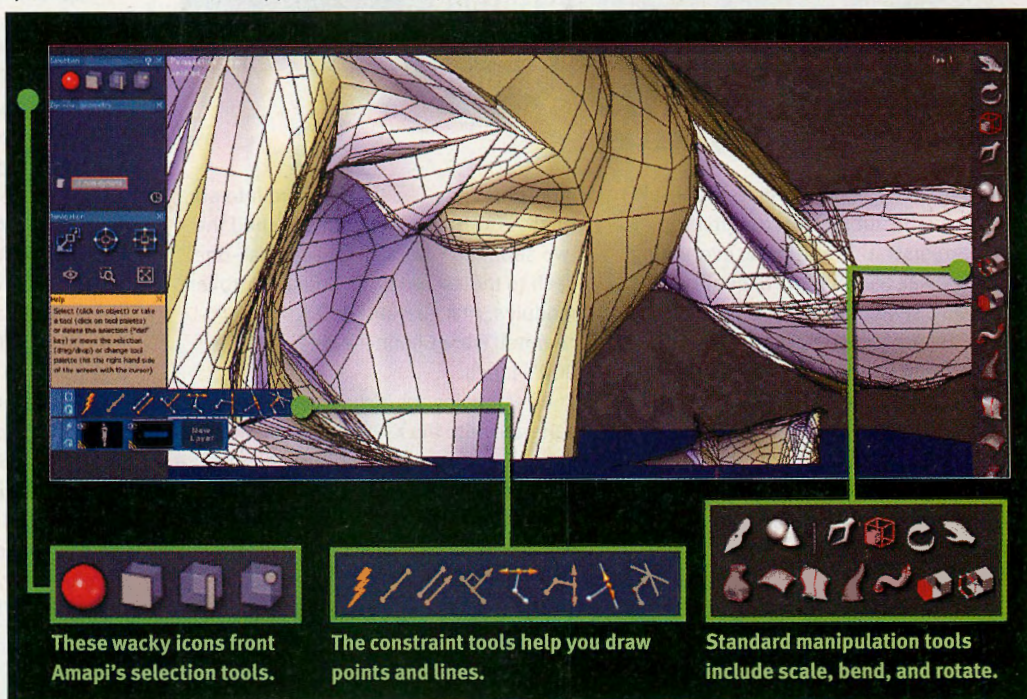


oft-requested multiple views are handy for looking at an object from several angles

simultaneously, and .OBJ import and export is now more accurate and reliable. Overall, Eovia has exercised remarkable restraint in terms of feature bloat. Previously available capabilities such as animation, image mapping, and Flash export are missing in version 7. Though this may sound like a failing, we prefer a clearly defined feature set, as applications that try to do

more of this erratic behavior.

The PDF-only manual is a pleasure to read, partly because of its confident optimism ("It will not take you more than a few hours of training to become acquainted with the philosophy of this new software and only a few days for you to become a confirmed user") and partly because of its charming pseudo-translations from the original French.



everything rarely do everything well. In any case, if you want to do animation, Eovia's Carerra is a powerful animation companion to Designer. One other note: Although Designer's renderer is passable, you won't win any awards using it—look elsewhere if you want to produce your own surfaces or get really techie with your light sources.

Our lowball testing machine (a 450MHz G4) kept up adequately, only occasionally choking on renders and responding slowly to keystrokes. Designer prefers full-screen mode, and although you can choose windowed mode, if you do you'll experience

Its explanations, however, are at times brief to the point of baffling. Also, keep in mind that when the manual for this cross-platform app says the Control key, it means the Command key.

If you're searching for a relatively inexpensive, powerful, and easy-to-learn modeler, Amapi Designer is a good choice. If you want a fuller-featured application, you may want to wait for Eovia's upcoming Designer Pro, which will offer more import and export options (.DWG and probably .3DS) and enhanced NURBS tools. Or you could invest in a more-multipurpose (read: expensive) app.—Paul Yoon



COMPANY: Eovia
CONTACT: 888-270-3038,
www.eovia.com
PRICE: \$499

REQUIREMENTS: 600MHz Power
Mac G3 or faster, Mac OS 9.2 or later,
128MB RAM, 24-bit color display, 3D
graphics accelerator card

GOOD NEWS: Powerful modeling tools. Charming (if somewhat confusing) manual.

BAD NEWS: Fewer features than previous versions. Nonintuitive interface.

MacAddict RATED
GREAT



REALbasic 5.1

SOFTWARE DEVELOPMENT ENVIRONMENT

Over the last several years, REALbasic has emerged as *the* definitive tool for rapid application development (RAD) on the Mac. The reason is clear: REAL Software has added features to REALbasic more quickly than a hyperactive hamster spins its wheel. Today, REALbasic supports everything from AppleScript to three-dimensional renders. Unfortunately, the strain of all these features is beginning to show. REALbasic's interface is sluggish and bug-ridden in OS X.

Version 5 adds some welcome features, such as a stand-alone debugger. In previous versions, debugging a REALbasic program involved running the debugger paired with the REALbasic compiler—to your Mac, they were essentially the same app. Before Mac OS X, this wasn't a problem—without OS X's memory protection, it didn't matter that the two procedures shared the same memory space. In Mac OS X, however, failing to separate the program from the compiler itself short-circuits OS X's memory protection—a bug in the code could crash

REALbasic's debugger. REALbasic 5.0 debugs programs in a new external debugger, avoiding this problem.

In its professional version, REALbasic now allows for multiple developers to work on one program at the same time—the app's Project Manager smoothly merges multiple changes back into the core project. This feature makes

Alpha	Theme
ArcShape Class	
Canvas Control	
CMY Function	
Color Data Type	
DarkenColor Function	
Dictionary Class	
EditField Control	
Function Statement	
Graphics Class	
HSV Function	
ListBox Control	
OvalShape Class	
Parameters are not Co...	
RBScript Control	
RectShape Class	
Rgb Function	
RoundRectangle Cont...	
RoundRectShape Class	

REALbasic's outstanding online language reference makes remembering how to use the various control types much, much easier.

REALbasic a little more suitable for large-scale projects.

A few language changes are also welcome—REALbasic now allows you to write IF-THEN and IF-THEN-ELSE statements on a single line. Previous versions insisted upon a full block structure (ending with END IF) for even

The left-hand toolbar illustrates REALbasic's main strength: You can code anything from QuickTime Movies to sprites quickly and easily.

simple conditionals, making code far bulkier than it needed to be. In addition, a new FOR EACH statement allows iteration through arrays in a fashion familiar to all you Perl coders.

Unfortunately, REALbasic's interface is marred by glitches. Windows don't always resize properly; controls mysteriously become grayed-out; and scroll bars don't reach the bottom of their windows, so part of the window content is inaccessible. These bugs combine to make this version of REALbasic far more frustrating to use than it should be. Combine this with supposedly cute clicks and chirps during text editing that no preference setting short of the Sound system preference can silence, and an interface sluggishness that will feel horribly familiar to users of the Mac OS X public beta, and you get a program that feels as though it were released before it was ready. Glitches like these are particularly surprising in a .1 version—these potholes should have been paved over by now.

Besides the glitches, there are substantial reasons why some coders might prefer to stick with Metrowerks's

CodeWarrior or Apple's array of development tools: It's much easier to performance-tweak C, C++, or Objective C code than it is to speed up REALbasic apps, and REALbasic's method of attaching code to controls can make it harder to keep track of code fragments.

REALbasic's continuing versatility makes it

rate a *solid* despite its bugs—there's still no better platform for the short development cycles demanded by minor shareware authors, in-house developers, and the like. Still, the polish that once characterized this app seems to have gone AWOL from this release. We miss it dearly.—Ian Sammis



COMPANY: REAL Software
CONTACT: 512-328-7325,
www.realsoftware.com
PRICE: \$449.95 (professional), \$149.95

(standard); other options also available
REQUIREMENTS: PowerPC-based Mac,
 Mac OS 8.1 to 9.2 or 10.1 or later, 32MB
 RAM, 20MB disk space

GOOD NEWS: Powerful RAD tool. Better compiler/
 runtime separation than in previous versions.
BAD NEWS: Tons of bugs. Interface sluggish in
 Mac OS X.

MacAddict RATED
 ●●●●●
SOLID

Final Scratch

DIGITAL DJ SETUP

Final Scratch is a DJ's dream come true. Using encoded vinyl records to control playback of digital music, Final Scratch gives old-school DJs traditional turntable control over new-school digital music—now you can ditch your record collection and spin your MP3s live. The Final Scratch system includes three encoded vinyl FS records, Native Instruments's Traktor FS 1.1 playback software, and an external USB ScratchAmp sound card that manages the flow of music and data to and from your turntables, mixer, and Mac via one USB and four RCA cables (also included).

We installed the Traktor FS software without a hitch, and smoothly imported MP3 files and iTunes playlists from our 600MHz iBook's hard drive into Traktor FS's own song database, which can

Lug 200 pounds of vinyl to a party? Never again.

also handle WAV, AIFF and Audio CD files. The software interface is simple. A pair of virtual decks correspond to your real-world left and right turntables. From the onscreen song list, you simply drag and drop a track onto deck A or B for playback. We found dragging and dropping from our iBook's touchpad cumbersome during fast sets, so we set up hot-key commands in Traktor FS's preferences to cue the tracks to either deck.

The FS records look just like good ol' 12-inch vinyl records—but if you play them on your stereo, all you'll hear is a screech not unlike modem hiss. That noise is the time code that Final Scratch uses to control a song's playback. The cueing and playback process is simple and intuitive. For example, place an FS record on



PHOTOGRAPH BY MARK MADEO

Digital tunes, analog control—the best of both worlds.

one of your turntables, and spin it until it displays 1 minute and 30 seconds in deck A. Then load an MP3 file of Britney Spears's "Oops!...I Did It Again" into the same virtual deck. When you spin the FS record, Traktor FS will play that lil' hypercommercial cutie's cooing chorus, since the chorus begins 1 minute and 30 seconds into the song. Even cooler, spin the record back and forth as quickly as you like—Britney will keep pace. On the rare occasions when our iBook couldn't keep up, the MP3 didn't skip. Instead, the song's tempo momentarily increased until the audio synced back up with the FS record's time code.

Choose songs from your playlist, drop them onto virtual decks, and you're ready to spin 'n' scratch the night away.



Traktor FS analyzes files for peak volume and bpm (beats per minute), so you know if your David Bowie and 2 Live Crew tracks have beats close enough to make a clean mix. It takes Traktor about a minute to scan each song, and the bpm detection rarely works exactly right, but pre-analyzing a song lets you load it into a virtual deck more quickly—the software will already know the song's beat and volume peaks. Traktor FS also provides a visual map of each file—great for monitoring how soon tracks will end.

You can also mix regular vinyl along with an FS record—controlled digital file, save your mixes, and grab tracks from your Mac's CD drive on the fly. This latter process isn't lightning fast, but when a cute clubber hands you a CD and asks you to play his or her favorite song, you can smile, wink, and comply. Final Scratch is swift enough to read two songs from of the same CD for simultaneous mixing.

Turntablists, listen up! Final Scratch adds digital music to your DJing bag of tricks, without upsetting your turntable-and-mixer tradition and without neglecting your spinning dexterity. Lug 200 pounds of vinyl to a party? Never again. —Brian Lam



COMPANY: Stanton Magnetics
CONTACT: 954-689-8833,
www.finalscratch.com
PRICE: \$699 (SRP), \$499 (street)

REQUIREMENTS: 500MHz G3 or faster (733MHz G4 recommended), Mac OS 10.2.3, 256MB RAM (512MB recommended)

GOOD NEWS: No more lugging around heavy crates filled with vinyl.
BAD NEWS: If your Mac bombs, so does your performance.

MacAddict RATED

AWESOME

SoundSoap 1.1

NOISE-REMOVING SOFTWARE

If cleanliness is next to godliness, SoundSoap 1.1 from Bias can take your tired and noisy audio files that much closer to the spirit in the sky. Available as both a stand-alone app and a VST plug-in for apps such as Bias Peak and Cubase SX, SoundSoap is designed to reduce or eliminate hiss, hum, rumble, and broadband noise from your audio files with a minimum of fuss. Even better, it doesn't require a graduate degree in physics to get impressive results.

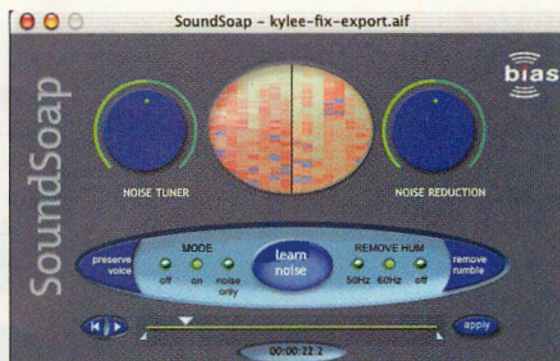
SoundSoap does a fantastic job of removing hum and noise.

SoundSoap starts by learning the characteristics of the noise you want to destroy, so you need to find an isolated incident of the offending sonic crud in your file so that SoundSoap

can analyze it. After that, you're essentially rendered redundant as SoundSoap works its magic to massacre the noise without sucking the sonic life out of your original file. If you want, you can tweak and tune the noise reduction manually, but the results we achieved by doing so were never better than what we got in automatic mode.

SoundSoap does a fantastic job of removing hum and noise, but it doesn't remove pops, clicks, or any other vinyl-restoration niceties. Since most hissy and hummy audio files suffer from a lack of presence, it would be cool if Bias included a bit of audio mojo to make the sound a bit crisper—but what do ya want for 99 bucks?

Of course there are other, more-expensive noise-reduction apps with



It's simple. It's easy. It works great.

additional features—such as graphical noise representations guaranteed to confuse you—but SoundSoap will keep up with the best of them when it comes to general noise reduction. If you're looking for a simple way to digitize and sanitize your beloved bootleg Foghat cassettes so you can listen to them on your iPod, SoundSoap is the way to go.—Kent Carmical



COMPANY: Bias
CONTACT: 707-782-1866,
www.bias-inc.com

PRICE: \$99
REQUIREMENTS: 400MHz G3 or
faster, Mac OS 10.2 or later

GOOD NEWS: Mac OS X support. Easy to use.
Inexpensive.
BAD NEWS: No vinyl-restoration capabilities.

MacAddict RATED
GREAT

radialL

AUDIO-LOOPING SOFTWARE

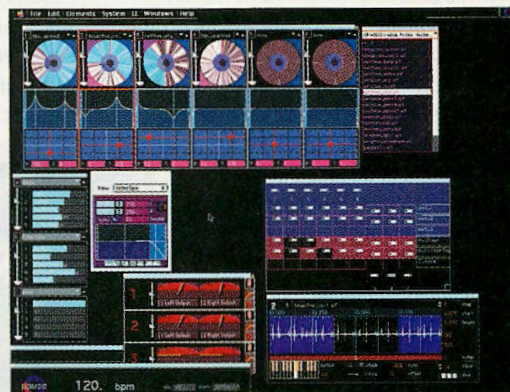
Cycling '74's radialL is a performance-based musical tool specifically designed to manipulate loops of melodies, sounds, and effects in real time. With a unique and intuitive interface, and lots of ways to control the show with MIDI keyboards and control surfaces, radialL has a fun-factor that rivals any video game.

To start, you drag audio samples from a list onto individual loop channels, represented as brightness bands on turntable-style, circular audio displays. As you play the loops, a radarlike sweep pulses over the display, and as other loops are loaded into new channels, they automatically synchronize to the same beat. A lot of radialL's magic is centered around its superior pitch and time-shifting

algorithms, which you can use to drastically alter the sound and tempo of loops. You can use any VST plug-in effect as an effect processor—and a sampling of delay, reverb, and modulation plug-ins from Cycling '74's Pluggo package are included. The Channel Matrix window delivers full audio routing and mixing controls, and you can get down to the nitty-gritty of sample editing using the Channel Inspector.

radialL offers a truly new approach to instantly creating music. We loaded some drum and bass loops from Reason 2.5 and had a slick riff going in moments. Using a MIDI keyboard, we were able to change the pitch and tempo of loops in real time by playing different keys.

You can record anything you do live to disk. radialL's DirectConnect and ReWire



The shiny look of the Channels palette isn't for show: Brighter pixels represent loudness.

compatibility mean you can use radialL directly inside of sequencers such as Digital Performer and Cubase.

radialL is an innovative and addictive way to make hip new grooves, and anyone serious about making electronic and dance music wants it yesterday.—David Biedny



COMPANY: Cycling '74
CONTACT: 415-869-2812,
www.Cycling74.com
PRICE: \$249, \$239 (download)

REQUIREMENTS: PowerPC,
Mac OS 9, 128MB RAM

GOOD NEWS: Unique and intuitive interface.
Flexible audio processing. Excellent graphic
equalization controls.
BAD NEWS: Mac OS 9 only. A little pricey.

MacAddict RATED
GREAT



The 10x zoom and 3x digital extra is almost like shooting through a pair of binoculars—maybe we'll start doing some undercover work on the side.

batteries in a pinch. It also ships with a puny 16MB xD Picture Card—enough for one TIFF image. Also annoying is that the camera's lens cap sometimes slipped off in our bag—beware its loose lock.

The camera has a quick response time that kept up with our trigger finger when shooting JPEGs, though burst speeds weren't fast

enough to capture a Barry Bonds hitting sequence. However, with TIFFs, it took way too long—about 15 seconds—to write an image to the card, and we couldn't do anything (except curse) during the process. The adjustable flash provided even, flattering light once we set the camera to auto white balance—before that, everything came out Smurfy. Composing shots with the LCD was easier than subjecting an eyeball to the pixilated mess that is the electronic viewfinder. Though the viewfinder offers true framing (a big plus when shooting outdoors in full sunlight), its grainy display made focusing—and seeing things clearly—difficult.

Most of our photos turned out well. Color reproduction was outstandingly accurate whether we used a custom-set white balance or any of the presets. The camera handled exposure nicely, and the manual controls and exposure compensation helped us perfect shots we took in less-than-desirable lighting. However, our JPEGs had noticeable noise in highlight areas.

Overall, nice camera, excellent zoom, great pics, some problems, bad TIFF-waiting time—bad, bad waiting time.
—Kris Fong

C-740 Ultra Zoom

10X-ZOOM DIGITAL CAMERA

The San Francisco Giants have a junkfood junkie on their team, and we have the evidence. Not that we were spying on them or anything—in fact, we were sitting about 200 feet away from their dugout. But then again, we did have this little camera with its incredible built-in zoom lens.

The 3.2-megapixel C-740 Ultra Zoom is Olympus's latest rev of its original spylake cam, the C-700. Like its predecessor, the C-740 has a voyeuristically tempting 10x optical zoom lens (38 to 380mm equivalent) that gives you the opportunity to capture shots from safe distances when you can't get up close and personal. The camera also features a 3x digital zoom; auto, aperture-priority, shutter-priority, and manual shooting modes; f-2.8 to f-8.0 aperture range; 16- to 1/1,000-second shutter speed range; auto, preset, and custom white-balance settings; multiple flash modes; and various scene, macro, and movie modes. Unlike its prior three iterations, the

C-740's lens elements are now all made of glass, improving clarity.

The camera's buttons and dial allow easy access to key features, but pecking and backtracking through tabs and menu screens got tedious fast. Battery life is great, thanks to the two CR-V3 nonrechargeable lithium batteries that ship with it (and are expensive to replace), though it can take four AA



The C-740's color handling makes us want to lick this pic. Believe it or not, this was shot under fluorescent lights—no studio lights here.



Andres Galarraga at 170 feet—that's zoom, baby.



COMPANY: Olympus
CONTACT: 888-553-4448,
www.olympusamerica.com
PRICE: \$499

REQUIREMENTS: USB-equipped
G3 or faster, Mac OS 8.6 to 9.x or 10.1
or later

GOOD NEWS: Amazing zoom. Good color accuracy and exposure handling.

BAD NEWS: Slooow TIFF writing. Some image noise. Minor focusing problems.

MacAddict RATED
●●●●●
SOLID

Harry Potter and the Chamber of Secrets

ACTION-ADVENTURE GAME

Harry Potter, the pint-size wand-waver, is back for his second year at Hogwarts School of Witchcraft and Wizardry in an engaging 3D action-adventure game. J. K. Rowling's superselling book, *Harry Potter and the Chamber of Secrets*, comes to life as Harry confronts dire peril, Quidditch matches, spectacular spells, and head-scratching-but-not-too-hard-for-a-kid puzzles.

To unlock the mysteries behind the Chamber of Secrets, Harry must learn several new spells, each of which is then tested in a challenge round. There are nine spells and all it takes to trigger one is for you to aim your wand and click the mouse button. Results can be spectacular.

Spot a treasure chest in the corner? Wave your wand and the chest bursts open and disgorges a Wizard card, a Chocolate Frog for stamina, or one to eight valuable Bertie Botts' Every Flavour Beans, which you can trade for such goodies as Wiggentree Bark or Flobberworm Mucous (used to prepare necessary stamina potions).

The plot has been simplified to make it gameworthy, but it still follows the book. Fans will applaud the Hogwarts experience as it unfolds with good animation, fine textures,

and free-roaming 3D environments.

But even good magic can go sour.

Sure, the second Harry Potter game offers more rooms, halls, and outdoor areas to explore; more spells; and new challenges and quests (such as fetching items for Hagrid and running errands for Dumbledore)—but advancing the plot requires tons of action-stopping load screens and cut scenes.

Also mildly irritating is the way games are saved. You can only save by walking



Harry, as star seeker for Gryffindor's Quidditch team, battles Draco Malfoy for the Golden Snitch.

through magic Save Books, located at predetermined spots that are often difficult to get to. What's worse is that each time you save, you overwrite a previous save. Once you save and move on, a door frequently slams shut and locks behind you—you can't back up to use an earlier saved version.

Despite minor faults, *Harry Potter and the Chamber of Secrets* is a pleasure to play, even if spells and puzzles have been dumbed down a bit for kids and casual gamers—hard-core gamers will breeze through. For the rest of us, the newest *Harry Potter* game is an engaging diversion.—John Lee



My school can't take the risk of someone accessing our student and administrative files on our old Macs



SuperScrubber

only \$29.99

ERASE THE RISK

Getting rid of an old Mac?

Data on your Mac is recoverable even if you delete files, trash files, or reformat your hard drive. Permanently remove data with SuperScrubber's military-strength disk sanitization.



www.superscrubber.com

(503) 520-9500

©2003 Jiiva, Inc., and its licensors. All rights reserved.

Jiiva



COMPANY: Aspyr
CONTACT: 512-708-8100, www.aspyr.com
PRICE: \$39.95

REQUIREMENTS: 350MHz Power Mac G3 or faster,
Mac OS 9.1 or 10.1 or later, 128MB RAM (250MB in OS X),
16MB VRAM

GOOD NEWS: Faithful to storyline. Good voice acting, animation, and special effects. Strong appeal for Potter fans.

BAD NEWS: Tons of load screens. Too easy for veteran gamers.



Pocket Digital

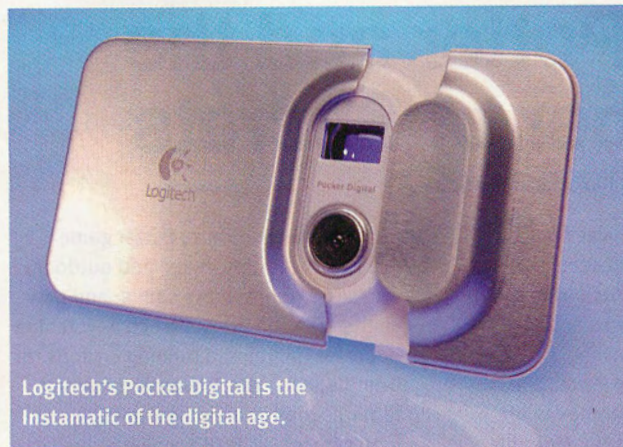
INSTAMATIC DIGITAL CAMERA

We don't often get to throw around words like *cheap* and *easy* when discussing digital cameras—then we got a hold of Logitech's Pocket Digital.

This is a zero-configuration device—purely point and shoot. OK, you can also set a timer to snap a shot ten seconds after you press the shutter button. (D'oh! There's no tripod mount.) Beyond that, you can turn off the camera's audio feedback, delete the most-recently snapped photo (or all of them) from the

The Pocket Digital took photos that didn't turn out as well as we hoped.

camera's internal 16MB memory, and enable the so-called high-resolution mode. But don't bother with high-res:



Logitech's Pocket Digital is the Instamatic of the digital age.

displays the number of pictures remaining (you get 52 at 640 by 480 resolution) and the battery's remaining life. When you connect it to your Mac via the included USB cable, the images slide right into Mac OS X's Image Capture or iPhoto. Bonus! The battery charges via the USB connection.

It's just a digitally interpolated zoom that you can do as well or better in iPhoto or any image editor—and anyway (again, d'oh!), it doesn't work with the Mac drivers yet.

So taking a picture is as simple as sliding open the camera—which turns it on and reveals the lens and viewfinder—and pushing the shutter button. The LCD

Easy as it is to use, it's also easy (really easy) to take bad pictures; shooting in less-than-ideal light situations pretty much guarantees muddy photos. At its best, the Pocket Digital looked cool, worked well with the Mac, and took low-resolution photos that didn't turn out as well as we hoped. —*Niko Coucouvanis*



COMPANY: Logitech
CONTACT: 800-231-7717,
www.logitech.com
PRICE: \$99.95

REQUIREMENTS: USB-equipped
Mac, OS 8.6 or later

GOOD NEWS: Small and easy to use.
Battery charges via USB.
BAD NEWS: Good photos are few and far between.

MacAddict RATED

SO-SO

iSight

FIREWIRE WEBCAM

The Webcam is back—and with dignity. Apple has replaced tainted memories of the risqué JenniCam with visions of smiling grandmas videoconferencing on iChat AV (see p26). Apple would love iSight to be your FireWire Webcam of choice, and it should be—if you've got the cash.

Apple would love iSight to be your FireWire Webcam of choice.

The iSight is a stylish and high-quality Webcam. It comes with three mounts: one that sticks to the back of your flat-panel display, one that sticks to the top of your CRT, and one that clips nonpermanently to your laptop screen. Each mount lets you swivel and tilt the camera.

After connecting one end of the plenty-long FireWire cable to the iSight by means of a somewhat clumsy adapter, just plug the other end into your Mac and watch as iChat AV configures it—no drivers required. We were also able to use iSight with the video-capture shareware BTV (\$20, www.bensoftware.com).

Picture quality is crisp. With a lens aperture of f-2.8, the iSight lets in a lot of light, so your images appear bright—that is, if your room is bright. In low light, it's another story—images are dim and faces are

on the splotchy side. In a well-lit room, our subjects picked up slight bluish and greenish casts from ambient fluorescent light, and fast motion appeared blurry—but, hey, it's a Web cam, not a DV cam.

The iSight also includes a voice microphone, which sounds tinny but clear using iChat AV.

Alas, the iSight is expensive—about \$20 more than Orange Micro's iBot Pro FireWire Web Cam (\$129 street, www.orangemicro.com), which includes a headset mic, and \$50 more than its no-mic model). However, the iSight's image quality is better—and it might improve further when iChat AV gets out of beta. —*Narasu Rebbapragada*

The iSight is easy on the eyes but hard on the wallet.



COMPANY: Apple
CONTACT: 408-996-1010,
www.apple.com
PRICE: \$149

REQUIREMENTS: FireWire-equipped 600MHz G3
or faster, Mac OS 10.2.5 or later, Internet connection
(dial-up for audio, broadband for video)

GOOD NEWS: Great image quality.
Good design.
BAD NEWS: Expensive. Poor low-light
capabilities.

MacAddict RATED

GREAT

i70 Color Bubble Jet Printer

PORTABLE PHOTO PRINTER

Canon's i70 color bubble jet printer prints surprisingly crisp, colorful, and—if you're running Jaguar—borderless photos. Actually making this printer portable, however, requires that you make an investment in addition to the substantial \$249.99 base price.

Once you install the driver, you can print in no time via USB. The i70 supports 4-by-6-inch, 5-by-7-inch, letter, and legal paper, as well as envelopes.

We were impressed with the quietness and print quality—up to 600 dpi in black and 1200 by 4800 dpi in color—and not annoyed with the speed. At highest quality, a borderless 4-by-6-inch print ate up 1 minute and 30 seconds on average, and a top-quality borderless letter-sized print took 3 minutes and 40 seconds. For a four-color printer, colors were vibrant



Making the Canon i70 photo printer portable will cost you.

and crisp. Black-and-white text was readable down to 5-point type, but the dots smeared a bit even at 12 points.

One curious quirk: When we printed a black-and-white photograph on Canon's

glossy Photo Paper Pro, it picked up a reddish hue that didn't appear on matte paper.

The i70 is portable—but for a price. The portable battery kit will cost you an extra \$99.99. Also, for direct camera-to-printer prints (via USB), you have to use a supported Canon still or video camera.

If you need to print in a semimobile scenario—say, in your car or hotel lobby—and are willing to invest in a Canon camera and battery

pack, you'll like what you print. If you're primarily tethered to a desktop, you can get a higher-quality, six-color inkjet printer for the same price.

—Narasu Rebbapragada

9

COMPANY: Canon
CONTACT: 800-652-2666 or 516-328-5000, www.canon.com
PRICE: \$249.99 (street)

REQUIREMENTS: Mac OS 8.6 or later, 20MB RAM, USB port

GOOD NEWS: Designed well. Prints well.
BAD NEWS: Need expensive extras for true portability.

MacAddict RATED
SOLID

PHOTOGRAPH BY MARK MADEO

Reason 2.5

SOFTWARE SOUND STUDIO

Although Reason has already earned its reputation as the software-based sound studio to beat, the folks at the aptly named Propellerhead Software have not rested on their collective Swedish laurels. Reason 2.5 is not as radical an upgrade as version 2.0 was (see *Reviews*, Mar/03, p50), but it brings some awesome new sonic tools to your Mac.

The most important new module is the RV7000 Advanced Reverb, a professional-quality digital-delay line capable of a multitude of time-based, sound-processing techniques. Effects include plates, halls, and multitap delays.

The Scream Sound Destruction Unit (SSDU) is the ultimate fuzzbox—there is no real-world, hardware stompbox capable of



Among the new modules in Reason 2.5 is the Vocoder module (at the top of the stack).

the SSDU's sonic mayhem and sheer growl. You know you're in for a ride when you see a knob labeled Damage Control—just dial in your desired amount of damage, with distortion types such

as Warp, Modulate, Tube, Feedback, and Scream. The SSDU also has an integrated 3-band equalizer and a resonant filter for further fine-tuning the overall tone, making it perfect for processing just about anything—soft piano passages, voices, and beyond.

Other coolness: a mighty Vocoder module that can make anything sound like a robot or modulate a piano passage with a drum track for wacky rhythmic funk, a slick Unison module that can thicken any sound, and incredibly useful audio and CV (Control Voltage) splitters/joiners—an addition long-requested by hard-code fans.

With the upgrade free for registered 2.0 owners, there's no reason not to move up to Reason 2.5.—David Biedny



COMPANY: Propellerhead Software
CONTACT: www.propellerheads.se
PRICE: \$449, \$99 (upgrade from 1.0), free (upgrade from 2.0)

REQUIREMENTS: 166MHz Power Mac or faster, Mac OS 9 or 10.1 or later, 128MB RAM, MIDI interface and keyboard recommended

GOOD NEWS: Unique distortion processor. Pro digital delay. Audio and CV splitters/joiners improve signal routing.
BAD NEWS: Needs a hefty processor to run many effects simultaneously.

MacAddict RATED
GREAT

9

I-Trigue i3350

2.1 SPEAKER SET

A good set of powered speakers paired with a Mac or an iPod can easily serve as a modest home stereo system. Creative Labs' I-Trigue i3350 takes care of the speaker half of the relationship with finesse. With a powerful 25W, wood-cased, 6.5-inch, long-throw woofer that can rattle the floor, plus 9W satellite speakers packing three of Creative Labs' awesome Titanium horns apiece, I-Trigue can fill a room with surprisingly full, rich sound. For quieter times, the satellites

The half-assed remote could sour the deal.

still sound fantastic when positioned optimally—like when they're aimed at you sitting at your desk.



Creative Labs' I-Trigue i3350: Beauty looks, beastly sound (in a good way)—and a few rough edges.

The wired remote has a headphone jack and separate, side-mounted dials for bass, power, and volume. But it also has a short, six-foot cord and neither grippy footies nor enough weight to resist the heavy cord's gravity. We suggest using the included strip of

These speakers look and sound great. They're plenty muscular for a bedroom or even a small apartment. The short speaker cords and half-assed remote could sour the deal, but cheap RCA extender cables can cure at least one of those problems.—*Niko Coucouvanis*

double-sided tape to batten the thing down to the top of the woofer or somewhere else within reach. Another remote annoyance is that the sweet spot of enough-but-not-too-much bass is hard to find—but it's there. Finally, although six percent of the population will appreciate that the dials are positioned and labeled for left-handed folk, they're awkward for us righties to use.



COMPANY: Creative Labs
CONTACT: 408-428-6600 or
800-998-1000, www.creativelabs.com
PRICE: \$99.99

REQUIREMENTS: Mac with
audio out, iPod or other audio source

GOOD NEWS: Classy look. Awesome sound.
BAD NEWS: Stiff cables look and feel cheap—
so does the remote.

MacAddict RATED
●●●●●
SOLID

iPodDock

DOCK FOR FIRST-GEN IPODS

First-generation iPod owners jonesing for that suave, docked-iPod look: This is your lucky day. From the makers of BookEndz docking stations for Apple laptops comes the iPodDock.

iPodDock is lighter in weight than Apple's dock, but rubber feet underneath help keep it from sliding around on your desk—or next to your stereo (audio-out jack included). If you don't mind your iPod looking silly when it's docked upside-down (the iPodDock also doubles as an unpowered, right-side-up cradle), this 30-buck dock is worth, well, about 30 bucks.—*Niko Coucouvanis*

Invert and insert your iPod to cure dock envy.



COMPANY: Photo Control Corporation
CONTACT: 800-787-8078,
www.bookendzdockvs.com

PRICE: \$29.95
REQUIREMENTS: First-generation iPod



GOOD NEWS: Helps old Pods stay put and plugged. Doubles as a cradle.
BAD NEWS: A little too light. iPod looks silly upside-down.

MacAddict RATED
●●●●●
SOLID

Auto Kit for iPod

IPOD CAR CHARGER AND PREAMP

Belkin's Auto Kit draws power from your cigarette-lighter socket and feeds it into your new third-generation iPod via a 2.5-foot cable with a handy cable-wrangling strap. A replaceable fuse protects your 'Pod from any electrical gremlins



Who says you can't take it with you?

(aka power surges and shorts) in your '72 Gremlin. Plug an optional cassette adapter or FM transmitter (such as Belkin's TuneCast; see *Reviews*, Aug/03, p52) directly into the device's amplified audio-out jack, and your tunes hijack the car stereo. Ultimately, it's a slick-but-slightly-expensive way to take your iPod on the road.—*Niko Coucouvanis*

COMPANY: Belkin
CONTACT: 310-898-1100,
www.belkin.com

PRICE: \$49.99
REQUIREMENTS: iPod with dock connector,
working car cigarette-lighter socket

GOOD NEWS: Great road-trip enabler.
Integrated safety fuse.
BAD NEWS: Extra transmitter required for
car-stereo playback.

MacAddict RATED
●●●●●
SOLID

Medal of Honor Allied Assault: Spearhead

GAME EXPANSION PACK

A mission pack for the superb World War II-based Medal of Honor Allied Assault, Spearhead puts you in the boots of an American GI who's got a bone to pick with Adolph's Third Reich. Like the original game, Spearhead's strength is its single-player campaign, which blends well-known historical scenarios with kick-butt action.

Highlights include a nighttime parachute drop over Normandy on the eve of D day; and holding the line with the fabled 101st Airborne Division in the Ardennes forest, weaving through foxholes as artillery shells rain down.

Spearhead also serves up a cache of new weapons—our favorite is the mortar launcher, which takes a while to



Welcome to D day. Next stop: Normandy.

aim properly but provides an oh-so-satisfying explosion when the ammo hits the target. Also new are smoke grenades, which can disorient both you and your enemies, and Sticky Bombs—affix one of these babies to a moving tank and run like hell.

Sadly, two flaws keep this mission pack from being as enjoyable to play as the original game. First, it took us only five hours, at medium difficulty, to clean the Nazi's clocks—all of them. You can draw out that time by replaying Spearhead at different difficulty levels, but single-player gameplay's still on the short side (though multiplayer fun can be endless). Second, a nasty bug occasionally slowed Spearhead's framerate to a crawl, even on the huskiest video card. This happened to us only a few times, but when it did, we became a sitting duck.

All in all, we loved paying another visit to Medal of Honor's rich, realistic world. We just wish our stay could have been longer and uninterrupted by technical difficulties.—*Helmut Kobler*



new weapons—our favorite is the mortar launcher, which takes a while to



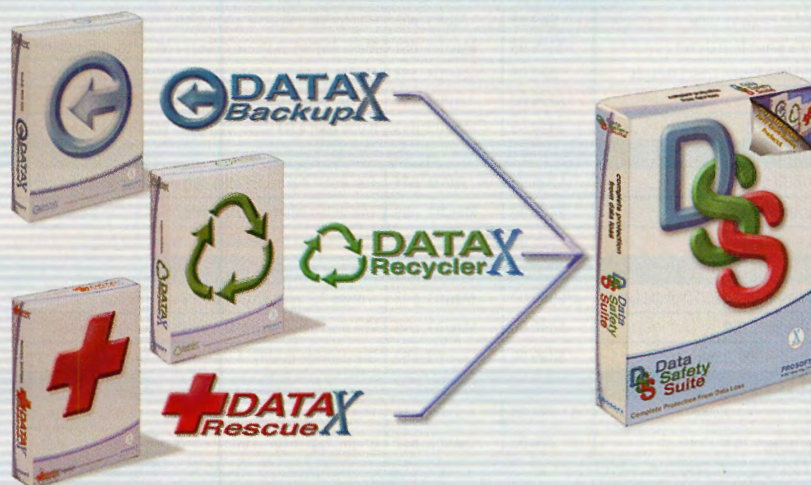
COMPANY: Aspyr Media
CONTACT: 888-212-7797,
www.aspyr.com
PRICE: \$29.95

REQUIREMENTS: G3 (700MHz recommended), Mac OS 9.2.2 or 10.1 or later, 192MB RAM (256MB in OS X), 16MB VRAM (32MB recommended)

GOOD NEWS: Great action. Rich, realistic environments. Beacoup new levels. Cool new weapons.
BAD NEWS: Single-player campaign goes too quickly. Bug slows framerate waaay down.

MacAddict RATED
●●●●●
SOLID

Three award-winning products • Now available in one powerful package

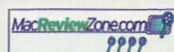


Data Safety Suite

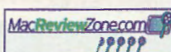
Backup, Undelete and Recover your valuable data

Data Safety Suite is your best protection against data loss.
Judge for yourself. Download a fully functional demo today at www.prosofteng.com/dss

PROSOFT
engineering inc.
www.prosofteng.com



Data Backup

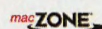
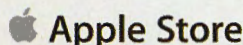


Data Recycler



Data Rescue

Data Safety Suite is available at



or call 1877-4PROSOFT

theHotList

THE BEST OF THE BEST FROM RECENT REVIEWS

SHOPPING?
HERE'S WHAT WE
RECOMMEND

NEW THIS MONTH



Marine Aquarium 2

Admit it, one of the reasons you own a Mac is "just because"—just because it's elegant and just because it's powerful. Reviews editor Niko Coucouvanis says he'd buy Marine Aquarium 2 "just because it's cool."

Zire 71

Here's a digital companion that redefines *droolworthy*—it's a PDA, a 640-by-480-pixel digital camera, an MP3 player, and a digital video player. Editor Cathy Lu calls it "one of the funnest Palms ever."



iTrip

Most FM transmitters for your iPod are limited to four frequencies—if radio stations in your area have grabbed 'em already, you're SOL. The iTrip, on the other hand, lets you scan the entire spectrum for an opening.

SOFTWARE

AUDIO

MOTU Digital Performer 3	\$795.00	Feb/02, p58	This pro-audio app has a great array of features.
Propellerhead Software Reason 2	\$399.00	Mar/03, p50	It's the best software-synth bargain available today.
Roxio Toast with Jam 5	\$189.95	Sep/02, p49	Burn CDs, MP3 CDs, DVDs, and VCDs, and edit audio.

GAMES

Aspyr Jedi Knight II: Jedi Outcast	\$49.95	Feb/03, p37	Fantastic gameplay with both weapons and The Force.
Aspyr NASCAR Racing 2002 Season	\$39.99	May/03, p57	Realistic NASCAR racing on a Mac? Believe it.
Aspyr The Sims Unleashed	\$29.95	May/03, p58	Pixel-pets abound in the best Sims expansion pack yet.
MacPlay No One Lives Forever	\$49.99	Mar/03, p49	A beautiful spy, sly foes, nifty gadgets, fast action—nice.

GRAPHICS & LAYOUT

Adobe InDesign 2.0	\$699.00	May/02, p50	Look out, Quark—Adobe's rival layout tool kicks butt.
Adobe Photoshop 7	\$609.00	Jul/02, p46	Picture-perfect pixel pusher moves to Mac OS X.
Adobe Photoshop Elements 2	\$99.00	Dec/02, p40	This has most of Photoshop's power for \$500 less.
FontLab 4.5.2	\$549.00	May/03, p53	The font editor all we type geeks have been waiting for.
Macromedia Dreamweaver MX	\$399.00	Sep/02, p44	Our favorite Web-design tool gets a strong upgrade.
Macromedia Flash MX	\$499.00	Jul/02, p51	It started in animation; now it can do anything.
Macromedia FreeHand MX	\$399.00	Jun/03, p49	In the race with Adobe Illustrator, FreeHand pulls ahead.

PRODUCTIVITY & UTILITIES

Apple Keynote	\$99.00	Apr/03, p48	This presentation app was built for Mac OS X—and it shows.
Bare Bones Software BBEEdit 7.0.1	\$179.00	Mar/03, p52	By far the most powerful text editor money can buy.
Microsoft Office v. X	\$499.00	Feb/02, p42	The 800-pound gorilla of productivity applications.
Prolific Publishing Marine Aquarium 2	\$19.95	Aug/03, p54	OK, it's just a screensaver—but it's the coolest one ever.

VIDEO & ANIMATION

Adobe After Effects 5.5	\$649.00	May/02, p49	This motion-graphics stud improves its 3D powers.
Apple DVD Studio Pro 1.5	\$999.00	Oct/02, p55	Apple's essential DVD-burning app gets even better.
Apple Final Cut Pro 3	\$999.00	Apr/02, p45	This pro-level video editor is a real-time revelation.

HARDWARE

ACCESSORIES

CharisMac FireWire Dino	\$69.95	Jul/03, p55	Run for your lives! It's a monster! It's a FireWire 400 hub!
Dr. Bott's extendAIR Direct	\$149.95	May/03, p51	Make AirPort Extreme's range noticeably more extreme.
MacWireless Power Over Ethernet	\$29.98	Jun/03, p61	Mount an AirPort Base Station 250 feet from AC power.
Palm Zire 71	\$299.00	Aug/03, p44	A PDA, digital camera, and MP3 player all rolled into one.
XtremeMac UFO	\$129.95	May/03, p59	If you own a G4 iMac, you gotta get this way-cool hub.

AUDIO

Apple 15GB iPod	\$399.00	Jul/03, p44	The world's greatest MP3 player gets smaller and cooler.
Digidesign Mbox	\$495.00	May/02, p59	This audio interface is a traveling musician's delight.
Griffin Technology iTrip	\$35.00	Aug/03, p52	This iPod FM transmitter uses the entire frequency range.

DIGITAL CAMERAS

Canon PowerShot S230 Digital Elph	\$399.00	Mar/03, p48	A great 3.2-megapixel camera in a tiny, low-cost package.
Nikon Coolpix 3100	\$340.00	May/03, p43	The best point-and-shoot digicam we've seen yet.
Olympus C-4000 Zoom	\$499.00	Jan/03, p52	Great image quality, 4 megapixels, and versatile controls.

DISPLAYS

Apple Cinema HD Display	\$1,999.00	Aug/02, p40	This 23-inch, 1,920-by-1,200-pixel beauty inspires lust.
Formac gallery 2010 Platinum	\$1,399.00	Jan/03, p47	Bright, fast, huge—and it costs only \$.0007 per pixel.

PRINTERS

Brother HL-1870N	\$699.00	Aug/02, p45	Need a sturdy laser printer? This one's a workhorse.
Epson Stylus Photo 2200	\$699.00	Oct/02, p42	The most stunning photo printer we've ever tested.

SCANNERS

Canon CanoScan LIDE 30	\$99.00	Nov/02, p52	This entry-level scanner gets the job done inexpensively.
Epson Perfection Photo	\$399.00	Oct/02, p48	This sophisticated scanner also handles transparencies.

STORAGE

LaCie d2 200GB FireWire 800	\$419.00	Jun/03, p47	FireWire 800 speed meets solid-as-a-rock construction.
Maxtor Personal Storage 5000XT	\$349.95	Feb/03, p44	Solid construction, push-button backup, and 250GB.
OWC Mercury Elite Pro	\$339.99	Jul/03, p53	This 180GB FireWire 800 drive outpaces the competition.



Multiple modes of play!



*Force your opponent off the screen
in PUSH™ mode.*



*Pull off thousands of real and
fantasy tricks.*

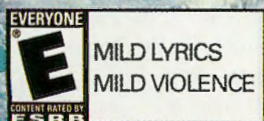


Never surf the same wave twice.

6 WORLD TITLES, NEVER THE SAME WAVE TWICE.



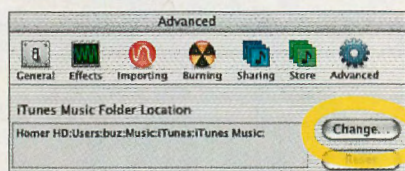
KELLY SLATER'S PRO SURFER®



© 2002 Activision, Inc. and its affiliates. PC and Macintosh versions distributed by Aspyr Media under license from Activision Publishing, Inc. Activision and Pro Surfer are registered trademarks and Activision 02 and Sports Revolution are trademarks of Activision, Inc. and its affiliates. All rights reserved. Kelly Slater is a trademark of Kelly Slater. Developed by Treyarch. The ratings icon is a registered trademark of the Interactive Digital Software Association. The Aspyr logo is a trademark of Aspyr Media, Inc. Mac and the Mac logo are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. All other trademarks and trade names are the property of their respective owners.

GOT A QUESTION?
NEED ADVICE?**ask
us** WE CAN HELP**ITUNES MOVES AGAIN**

What's the simplest way to move the iTunes Music Library to a new location?



Click Change to move your iTunes Library.

In a previous issue (*Ask Us*, Jun/03, p65), we told you to move your iTunes Library and then create an alias pointing to it. Here's another way. In iTunes Preferences, click the Advanced icon or tab and the Change button to navigate to and choose a new iTunes Music folder.

DOUBLE THE ETHERNET

My old LaserWriter Select 360 connects to my iMac's Ethernet port (via a LocalTalk-to-Ethernet bridge box), but so does my DSL modem.

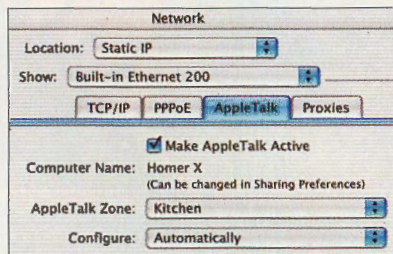
How can I connect them both at the same time?

Plug your printer, your iMac, and your DSL modem into a simple Ethernet hub (see "Network Your Old Mac," below), and you're done.

NETWORK YOUR OLD MAC

How can I network my new iMac running Mac OS 10.2 to my old Performa 6400 running Mac OS 9.2?

All you need is an inexpensive Ethernet hub like the Asanté FriendlyNet FH405 five-port 10/100 hub (\$39, www.asante.com), a couple of standard Ethernet cables, and a PCI Ethernet card for the Performa. First, connect both computers via Ethernet to the hub. On the Performa, open the AppleTalk control panel and choose Ethernet in the Connect Via menu. On the iMac, go to the Network system preference pane. Select Built-in Ethernet from the Show pop-up menu, click the AppleTalk tab. Check the Make AppleTalk Active box and click Apply. Now, your computers are now networked. To set up simple file sharing, use the Performa's File Sharing control panel and the iMac's Sharing system preference.



AppleTalk lets your old Mac talk to your new one.

REVIVE THE SETUP ASSISTANT

How can I get my Mac OS X iMac to run the Setup Assistant at startup like it did when I first got it?

Delete the hidden File called .AppleSetupDone from the /private/var/db/ folder, and the Setup Assistant will launch when you restart your Mac. Head to the Terminal and type the following: `cd /private/var/db`. This gets you to the directory containing the .AppleSetupDone file. Next, type `sudo rm .AppleSetupDone`. This invokes root powers and deletes the file.

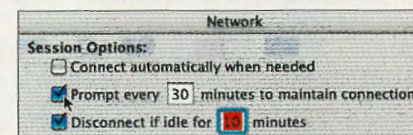


WARNING!
The `sudo rm` command is dangerous and can delete system files and folders.
PROCEED WITH CAUTION!

STOP ASKING ALREADY

Why does my telephone modem want to disconnect me every half hour?

You can turn this annoying feature off. Open Mac OS X's Network system preference pane, select Internal Modem from the Show pop-up menu, then select the PPP tab. Click the PPP Options button, and make sure Prompt Every 30 Minutes To Maintain Connection is unchecked in the sheet that appears. In Mac OS 9, turn the reminder off in the Remote Access control panel.



Uncheck the Prompt Every 30 Minutes check box and stay connected.

**quick
answers** TO QUICK QUESTIONS**ISYNC INFO**

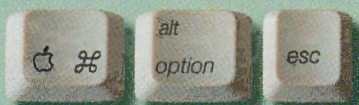
How can I find out if Apple's iSync app supports my cell phone?

Check Apple's list of compatible devices at www.apple.com/isync/devices.html.

**FORCE QUIT**

How can I force-quit apps in Mac OS X?

Choose Force Quit in the Apple menu. Alternately, use the Command-Option-Escape key combo, or Option-click the apps' Dock icons and choose Force Quit from the contextual menu that appears.



Use this key combo to Force Quit.

BIGGER, PLEASE

How can I increase the size of the text on Web pages to make them easier to read?

The Command-plus (+) and Command-minus (-) key combos make text bigger and smaller in Apple's Safari and Microsoft Internet Explorer. The commands themselves are tucked away in the View menu in both programs.



Type is easier on the eyes when it's bigger.



No whining—
anyone
can do this!



It'll take some
effort, but you
can do it.



This stuff's
for the pros.

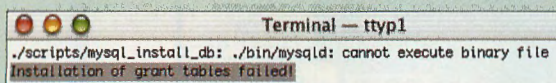
UNIX UNIVERSITY



What does it mean to compile Unix software?

For software to run on any computer platform, programmers need to convert the source code they write to a form the computer understands and can execute. This conversion process is called compiling, and special utilities called compilers accomplish

every Mac OS X CD, Apple includes a Developer Tools CD. On new Macs, the Developer Tools folder is in Applications > Installers—it contains all the tools needed to compile Unix software. Be forewarned, though—compiling Unix software is not a job for beginners. Check out <http://developer.apple.com/techpubs/macosx/Darwin/GettingStarted>



Argh! Compiling can be frustrating.

this task. Since Unix has historically been a command-line-driven operating system, Unix compilers are also command-line tools. Along with

for Apple's official guide to porting Unix software to Mac OS X, and <http://macosx.forked.net> for tips and tricks.

TRANSCRIBE THIS

Can Mac OS X function as a voice recorder and transcriber?

Yes. Get MacSpeech's iListen Transcription Solution

(\$299, <http://macspeech.com>), which bundles the iListen voice-recognition software with a Griffin iMic USB Audio Adapter, a microphone-headset, and a refurbished Olympus DS-2000 digital voice recorder. This complete package can input your audio from any source and transcribe it for you.

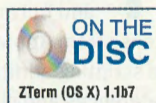


You talk, it types.

MAC SERIAL CONSOLE

My laptop needs to connect via a serial connection to Sun servers and Cisco routers for troubleshooting and configuration. Is there a supported USB-to-nine-pin serial adapter that I can use in Mac OS X?

Start with the Keyspan High Speed USB Serial Adapter (\$59, www.keyspan.com) and install the drivers. Then install Dave Alverson's ZTerm for Mac OS X (\$20, <http://homepage.mac.com/dalverson/zterm>), which allows your Mac to communicate with your serial device in the same way that HyperTerminal does on Windows PCs.



ThisMonth

62 Protect Your Privacy with AppleScript

What you do is your own business, but that won't stop snoops from uncovering your Mac affairs. We give you a lesson in AppleScript and show you how to use it to shred your virtual paper trail.



66 Manage Multiple Accounts in Entourage

Let's face it: You probably have multiple identities—email identities, that is. If you don't want messages to slip through the cracks, we show you how to manage your multiple personalities.

68 Go Old School with Mac OS X

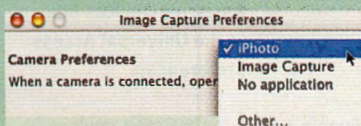
If you get all misty-eyed thinking back to the good ol' days of WordStar and ProTERM, you can bring your past into the present if you're running Jaguar. Really. Dry those eyes, and we'll show you how to do it.



AUTO-LAUNCH IPHOTO

How can I tell iPhoto to launch when I connect my digital camera?

Launch Image Capture. Under Camera Preferences, specify that you want iPhoto to launch when you connect your camera.



Connect your camera. Launch iPhoto.

TAKE TIFFS

How can I take Mac OS X screenshots as TIFFs instead of PDFs?

Mac OS 10.2's screenshot keyboard shortcuts (Command-Option-3 and Command-Option-4) take only PDF screenshots. For TIFFs, use the Grab app, located in your Applications > Utilities folder.



Seven years of handling tech support for Apple, Power Computing, and a Texas school district have given Buz Zoller Mac superpowers.

Submit technical questions or helpful tips directly via email (askus@macaddict.com) or c/o MacAddict, 150 North Hill Dr., Brisbane, CA 94005.

Protect your Privacy with AppleScript

by Johnathon Williams

TRICKY

WHAT YOU NEED

- Mac OS 10.2.3 or later (\$129, www.apple.com)
- Apple GUI Scripting (free, www.apple.com/applescript/GUI)
- Apple Mail (part of Mac OS X)
- Apple Safari (free, www.apple.com) or Microsoft Internet Explorer 5.2 or later (free, www.microsoft.com/mac)

Welcome to the **MacAddict School of Script-Fu**. The bad news: *They are watching you.* The good news: One script can shred your virtual paper trail.



PHOTOGRAPH COURTESY OF APPLE

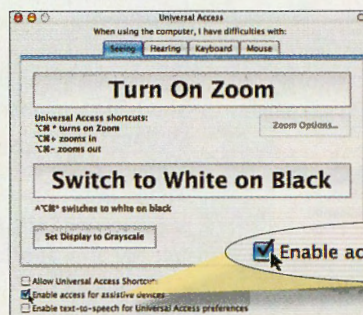
In 1984 (the book, not the year—or the Van Halen album), author George Orwell imagined a future where technology eradicated privacy—you know, all that “Big Brother is watching” stuff? Orwell never lived to see a personal computer, and maybe that’s a good thing. The shock might have killed him prematurely.

Why? Your Mac records just about everything you read, write, listen to, and watch on it. It does this for your convenience, to spare you from having to repeatedly hunt down your favorite documents and Web sites. Unfortunately, what is convenient for you is also convenient for snoops. Luckily, we Mac addicts have a safety net.

It’s called AppleScript.

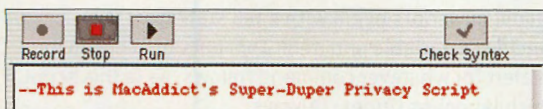
For the uninitiated, AppleScript is an English-like scripting language built into the Mac OS. With a little know-how, you can use it to create a digital watchdog for your own desktop. If privacy is something you covet, here’s how to create a script that will obliterate your deleted email in Mail, clear Safari and/or Internet Explorer’s browser cache and history, make the contents of your Recent Items menu disappear, and then empty your Trash. It won’t prevent a totalitarian government from one day ruling the world, but hey—you gotta start somewhere.

1 Go Get GUI Late last year, Apple released a beta of its GUI Scripting (aka UI Scripting) software, an AppleScript addition that allows scripts to click menus and buttons just like a human. Download the beta release from Apple’s site, but don’t install it just yet. To make the scripting addition work with your system, open System Preferences and click the Universal Access preference. In the resulting panel, check the Enable Access For Assistive Devices box, and close the window. Install the UI Scripting software by double-clicking the System Events package in the UI Scripting folder, and you’re ready to rumble.



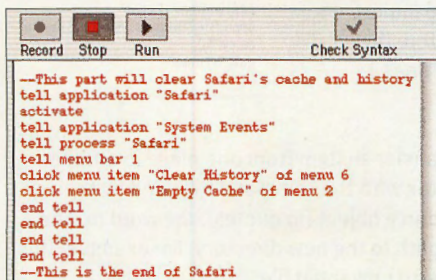
To allow AppleScript to click buttons and menu items, check the **Enable Access For Assistive Devices** box in the Universal Access preferences.

2 Start Your Script OK, let's start scripting! Launch Script Editor (inside Applications > AppleScript) to call up a blank script window. The top Description box allows you to type what your script will do. Filling this in is optional. The box below it is where you actually write the script. Click in the bottom box and type **--This is MacAddict's Super-Duper Privacy Script**. The double-dash (--) preceding the text tells AppleScript that the text string that follows is not a command but a comment, and to ignore it. Use it to make notes about segments of your script for yourself and others who may study your code. Then press Return twice to skip down a couple of lines.



To post reference notes about parts of your script, add a double-dash before a text string.

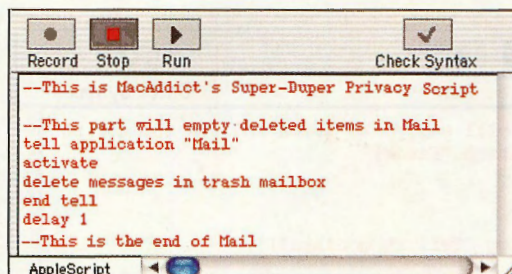
4 Make Browser History Most Web browsers keep records of every Web site you visit. This can be helpful, as it speeds up Web surfing. It can also be incredibly revealing. Therefore, create a script that deletes your browser history and cache. We show code for Safari and Internet Explorer—if using the latter, skip to step 5. Safari users: To create the actual script, copy the text exactly as it appears in the screenshot below. At the end, press Return twice, and then skip to step 6 (unless you also use Internet Explorer).



Copy this text exactly as shown to create a script that deletes Safari's browser history and cache.

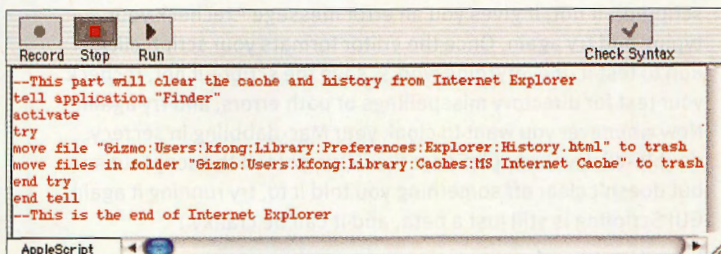
6 Make Recent Items History Now create a script that clears your Recent Items from the Finder. Although having stuff in Recent Items can save you from hunting for your files and apps, you might not want snoopy coworkers or other eyeballs browsing through its contents to see what you've been up to. Again, copy our text verbatim, as pictured in the screenshot at right. Remember that AppleScript is case-sensitive. When you refer to an application or directory, make sure you cap or uncap appropriately (type names exactly as they appear in the Finder) except for comment text—anything goes there. When you're finished, press Return twice.

3 Create a Mail Delete Script First up, create a script segment that tells Mail to delete all email in its Trash mailbox. (If you're not a Mail user, skip to step 4.) With AppleScript, you can write script text almost as if you were speaking it. Copy the script shown in the screenshot below exactly. The delay 1 command following the end tell command tells AppleScript to pause for a second before it tackles the next task. After typing a closing comment, press Return twice.

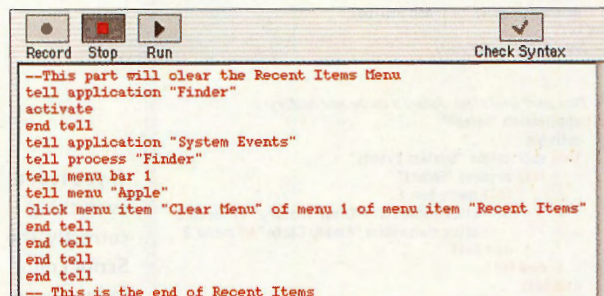


AppleScript language looks just like plain-old English—as spoken by Captain Kirk.

5 Script for Internet Explorer Because GUI Scripting doesn't play as nice with Internet Explorer as it does with Safari, we will have AppleScript move certain IE files to the Trash instead of clearing history. Check out our screenshot below and type the code as displayed with the exception of two lines. In the line that begins with *move file*, replace *Gizmo* with the name of your own hard drive and replace *kfong* with the name of your own user directory. Replace the same variables in the text string on the next line. Finish by typing the remaining text as shown and press Return twice at the end.

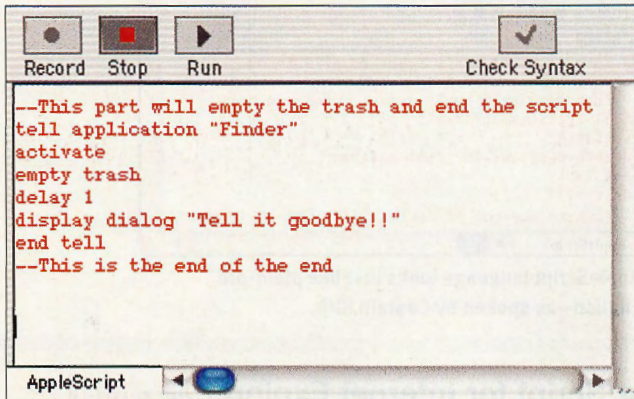


Because AppleScript is pickier than a new mother-in-law, be sure to type all directory names exactly as they appear when typing script (the code is case-sensitive).



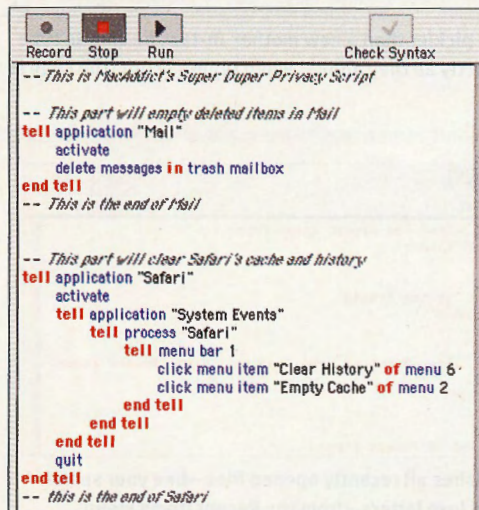
This script banishes all recently opened files—like your secret collection of old love letters—from the Recent Items menu.

7 Take Out the Trash Only one thing remains: creating a script segment to empty the Trash. Here's how to create one that not only does just that, but also notifies you when it's done. Once again, type the code exactly as shown in the screenshot below, but feel free to replace the quoted text on the *display dialog* line with whatever you want—this is what AppleScript will display in the dialog that appears when the script finishes running.



We saved the trashy stuff for last—here's the code.

8 Cross Your Fingers and Run Before you have AppleScript check your script, read through it carefully for any typos. AppleScript, like any scripting language, is very picky about syntax. When finished, cross your fingers—the moment of truth has arrived. Click Check Syntax to have AppleScript verify your work. If the script's good, the editor formats the text (and will launch some of the apps you scripted). If not, it gives you an error message—recheck your typing and try again. Once the editor formats your script, click Run to test it. If everything works, save the script—if not, recheck your text for directory misspellings or path errors, and try again. Now whenever you want to cloak your Mac-dabbling in secrecy, double-click your AppleScript file. (One note: If the script runs but doesn't clear off something you told it to, try running it again. GUI Scripting is still just a beta, and it can be cranky.)



If you typed everything correctly, the Script Editor formats your script nicely and colorfully.

SCRIPTING STRUCTURE

by Johnathon Williams and Kris Fong

If you're a scripting neophyte, prepare to get hooked. AppleScript is so easy to learn that it's made scripting junkies out of technophobes. Because its language core is built around plain-old English, you can get a general understanding of how things work by merely studying scripts. If you're gung ho to roll your own, here are some common AppleScript statements and commands, and how to use them.

tell

Almost all scripts begin with a tell statement that specifies a variable and item. This puts the chosen item on alert for whatever command follows, as in this script, which launches iTunes. (Always close a tell statement by typing **end** **tell** at some point in the script.)

```
tell application "iTunes"
  activate
end tell
```

open

This application-specific command instructs an app to open a file or files. For example, this script imports all the songs in our MP3

```
tell application "iTunes"
  open file "Gizmo:Music:MP3 Dump"
end tell
```

quit

Use this to quit any app you opened. For example, if we wanted iTunes to quit after it imported our songs in the script above, we'd write this. (We typed **delay 30** to pause the script for 30 seconds, giving iTunes time to import our songs before the script quits iTunes.)

```
tell application "iTunes"
  open file "Gizmo:Music:MP3 Dump"
  delay 30
  quit "iTunes"
end tell
```

move

Use this to transfer an item from one place to another. Start the syntax with the command followed by the path to the source object (in quotes), the word *to*, and a reference or path to the new directory. For example, this script trashes an unwanted file.

```
tell application "Finder"
  move "Macintosh HD:Users:johnathon:Documents:microsoft-sale" to trash
end tell
```

set

This command tells AppleScript to set a variable as another value. When writing this, place the variable first and the value that it represents last. For example, this script sets a text title to a link.

```
set Best_Mac_Forum to "http://www.macaddict.com/forums/"
```



Johnathon Williams is an avid script writer who collects conspiracy theories in his spare time.

sportsuitTM convertible

The complete solution
for the active iPodTM

Sportsuit
Convertible

ceo

CEO Glove

Sportsuit Sleeve

Sportsuit Convertible includes armband and belt clip for maximum versatility

MARWARE

954-927-6031



www.marware.com

sportfolioTM

Sportfolio II

Laptop cases and protective sleeves
for all Apple® PowerBook
and iBook computers

Sportfolio I

Sportfolio Sleeves

Sportfolio Extreme

Manage Multiple Accounts in Entourage

by Cathy Lu

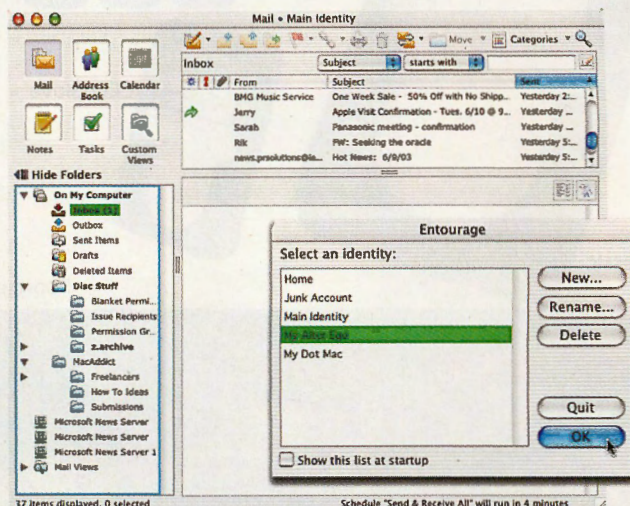


WHAT YOU NEED:

- Microsoft Entourage (\$99 or part of Office 2001 and later, www.microsoft.com/mac)

We're not crazy, but we do have multiple personalities. They just happen to be in the form of multiple email addresses. After all, in this day and age of spam gone wild, what brave soul treads across vast spambot Web fields with only one email address? Most of you probably have a work address, a home address, and your prized .Mac address that you faithfully (through gritted teeth) shell out \$99 for each year.

As the possibility for multiple email account disorder increases, so does the importance of having a good way to manage all of your accounts. Thankfully, Microsoft Entourage (our email app of choice) provides several ways to set up and manage multiple email accounts. Depending on your preferences and needs, here are three different ways to get a grip on them.



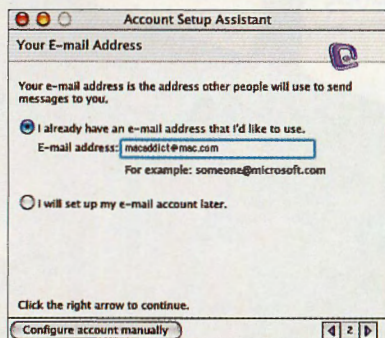
Got more than one email account? Entourage lets you manage them all as one happy family or as distinct individuals—the choice is yours.

Create One Big Happy In-Box

There are two types of people in this world: Those who don't mind having their peas touch their mashed potatoes (or their email accounts mixing) and those who do. If you're of the first breed, and don't mind having messages from your various

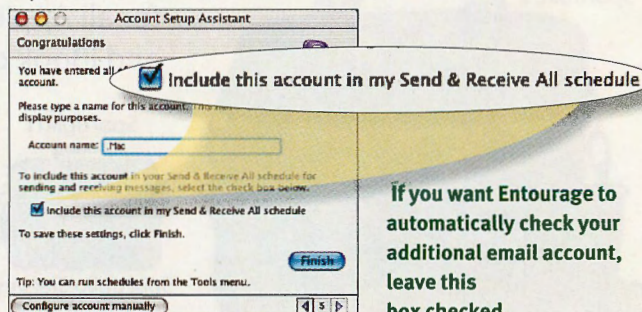
email accounts flood into one in-box, here's a supercinchy way to get email from all of your accounts collectively (this works for other email apps too—just apply our instructions accordingly).

- 1 Add an Account** Launch Entourage and from the Tools menu, select Accounts. In the resulting window, click New. Entourage's Account Setup Assistant opens and asks you for info about the email account you wish to add, including the address, password, incoming mail server, and outgoing (SMTP) mail server. Fill in this info in the provided fields. For you Dot-Mac-ers, use mail.mac.com as the incoming server but use your own ISP's SMTP server to send messages.



The Account Setup Assistant walks you through several windows to help you set up a second account.

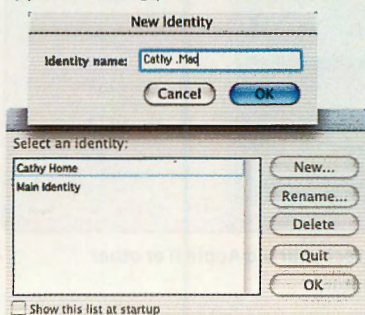
- 2 Set Send & Receive Options** In the final Congratulations screen, type a name for your account in the Account Name field. Then check the Include This Account In My Send & Receive All Schedule box to have Entourage check the account in addition to your main account when you click Send & Receive. If you don't want this, uncheck this box. Either way, you can still check your accounts individually by clicking and holding Send & Receive, then selecting an email address from the drop-down menu. Repeat for all other accounts.



Maintain Separate In-Boxes

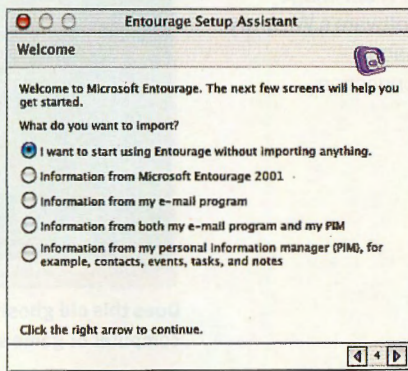
If you want to keep all of your email accounts separate—we're talking separate in-boxes, separate address books, separate calendars, separate everything—you can. This is especially helpful if you'd rather not mix business with pleasure.

1 Create an Identity First, quit any other Microsoft Office app that's open. Then in Entourage, select Switch Identity from the Entourage menu. A dialog appears, asking if you're sure you want to switch identities (it won't let you if you didn't quit all other Office apps). Click Switch; the interface disappears and another dialog appears, listing your various identities. If you've never created an identity, you should see only one listing: Main Identity. Click New, type a name for your account in the resulting dialog, and click OK.



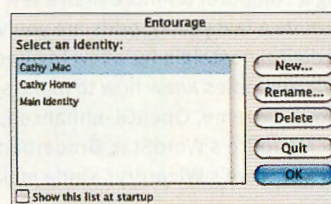
To create a new identity, click New (duh), and then type an appropriate name for it.

2 Feed It Info Time for Setup Assistant hell. In a series of dialogs, Entourage requests info for everything under the sun—your name, address, where you work, what kind of car you drive, your favorite *Friends* cast member (well, OK, not the last two). Play along until it asks what you want to import—you can import data from a PIM, another email app, Entourage 2001, or nothing at all (there's no option to import from another identity, but see "Maintain Your Contacts," below, for a workaround). Choose one and continue the question-and-answer game, setting up email accounts under your new identity as described in "Create One Big Happy In-Box," previous page, until you click Finish.



Let Entourage know if you want to import a database from another email app or PIM—or if you just want to get on with it already.

3 Change Your Identities You now have your new email account set up in a completely new in-box. Everything that you now add to Entourage's Calendar, Address Book, Notes, and other features will be married to this account independent of your Main Identity (or any other subsequent identity you set up). Anytime you want to access a different email account, just choose Switch Identity from the Entourage menu, select the desired identity in the resulting dialog, and click OK.

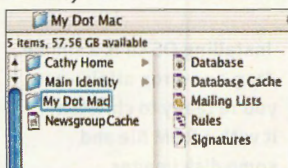


This dialog allows you to toggle between your different identities.

Maintain Your Contacts

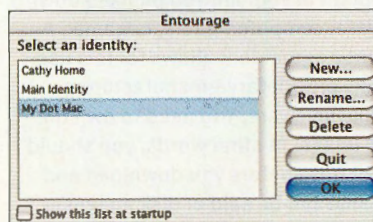
By setting up a new identity, you get the benefit of keeping, say, your work email separate from your personal email. Unfortunately, because Entourage won't let you import anything from an existing identity to a new one, you've got to start from scratch to build a new database of contacts for that identity—or do you? Not with this workaround.

1 Copy the Database If you want to create a new identity while carrying over all your Entourage Address Book content from your Main Identity, duplicate your Main Identity's database. Go to Users > user name > Documents > Microsoft User Data > Office X Identities, make a copy of the Main Identity folder (Command-D), and then rename the copy as whatever you want to call your new identity—we renamed ours *My Dot Mac*.



After duplicating our Main Identity folder, we renamed it to create a new identity, *My Dot Mac*.

2 Tweak Your Identity Select Switch Identity from the Entourage menu. In the resulting dialog, select your new identity, and then click OK to open the account in Entourage. Yay—you have your contacts. But yikes—you also have an exact clone of your Main Identity's data. First, change the email settings to reflect your .Mac account (select Accounts from the Tool menu). Then delete all the messages from your in-box and set up folders. Prune through the calendar, notes, or any other unwanted data, including your contacts. After all, you don't need your boss's info cluttering up your personal email.



After you rename the copied folder, the new identity pops up in the list when you command Entourage to switch identities.

MacAddict editor Cathy Lu has so many Entourage identities that she's beginning to forget who she really is.

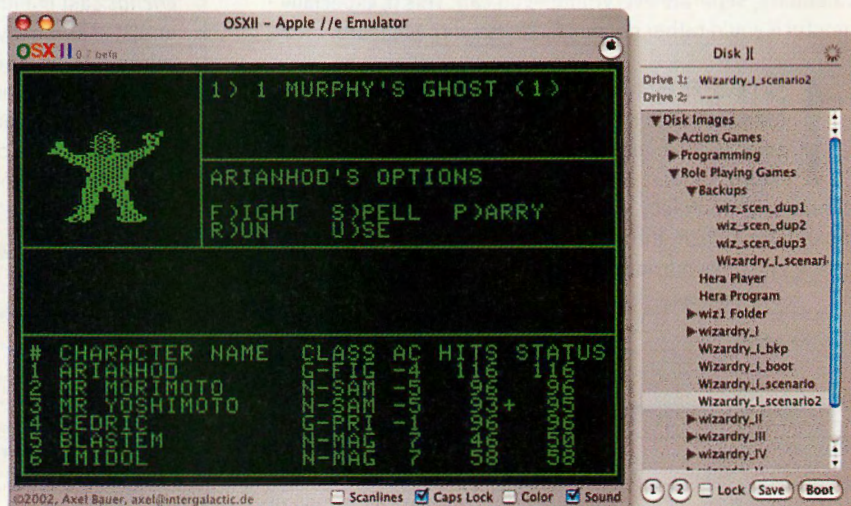
Go Old School with Mac OS X

by Emory Christensen



WHAT YOU NEED

- Mac OS 10.2.2 or later (\$129, www.apple.com)
- OSXII (free, <http://homepage.mac.com/axelbauer/apple2>)
- Apple II (or ROM image)
- Sir-Tech Software's Wizardry (or disk image)
- Internet connection



Does this old ghost bring back fond memories? Resurrect your old Apple II or other computer or game system with Mac OS X and an emulator.



If you've been using a computer for more than a few years (and we're talking *quite* a few years), odds are you've developed a bit of digital nostalgia for a few favored ancient apps. Back in the day, companies *knew* how to make software—none of this 32-bit, Aqua Extreme, OpenGL-enhanced, bloated nonsense. Remember MicroPro's WordStar, Broderbund's Choplifter, or Sir-Tech Software's Wizardry? Kinda makes you weepy, doesn't it?

Well, dry those eyes, you reminiscing ol' nostalgia addicts.

You can return to those glory days, and you don't even have to leave the comfort of Mac OS X to do it. How? Emulation. With the right software, you can bring an Apple II, a Mac Plus, a Commodore VIC 20, an Amiga, a TRS-80, or any number of other old machines back to virtual life in an Aqua window. We show you how by resurrecting the granddaddy of the Mac—the Apple II—and the grandmommy of dungeon crawls—Wizardry—on your Mac. So set your Wayback Machine to the early 1980s, and get ready to enjoy past memories in the present.

THE LEGAL ROMIFICATIONS

We interrupt this tutorial to bring you this important announcement.

The World Wide Web is not your oyster when it comes to downloading ROM images and disk images—stuff required for this how-to. Sure, you can find a ton of files out there, but you can't *legally* download and use any file unless you own it—meaning at some point in your life you plunked down the cash to buy that software, computer, game, or game system—or unless the license agreement allows for this use.

ROM images are generally proprietary—manufacturers copyright these files just like software. You need to own the hardware to have the ROM image. In other words, you should own an Apple II—working or not—before you download and use the ROM image. The same can be said of disk images—unless you bought the software at some point, you cannot legally download and use its disk image. OK? OK.

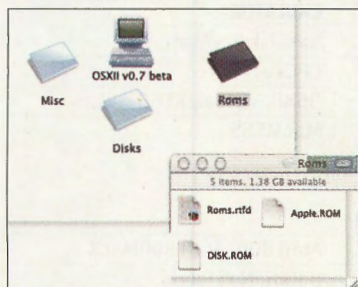
We now return to our regularly scheduled tutorial.

1 Grab the Goods The first step to running a machine-within-a-machine is deciding what type of machine to run. Emulators fall into two categories: computers and game systems. On top of that, each machine type may spawn a number of different software emulators. To emulate an Apple II, we chose a rock-solid open-source program called OSXII. However, if your Mac doesn't meet OSXII's steep 500MHz Jaguar requirements, check out "Emulators for Everyone," p70, for alternatives. To install the software, download OSXII from the Web or grab it from our Disc, mount the disk image, and drag the OSXII folder icon to your Applications folder (or anywhere else) to copy it.



Installing OSXII is a simple drag-and-drop affair—now you're ready to christen it with a ROM file and some disk images.

2 Round Up a ROM To make an emulator run, you need a ROM (read-only memory) image, which is essentially a software version of a machine's read-only chip (or set of chips) that contains instructions for turning microprocessors and other hardware into an Apple II, an Amiga, a Mac, or some other machine. To boot OSXII, you need two ROM files—an Apple II ROM image and a Disk ROM image. If you have an Apple II, use a ROM imaging utility, such as GetROM (part of Basilisk II, a 68K Mac emulator), to create the files. If not, grab them from the Web (don't forget "The Legal ROMifications," p68). You can find both as part of a Windows Apple II emulator at ftp://ftp.apple.asimov.net/pub/apple_II/emulators/apple_2_for_windows/apl2em. Click the `apl2em.zip` link to download the package. Then open the `apl2em` folder and move the `Apple.ROM` and `DISK.ROM` files to the `Roms` folder inside the `OSXII` folder.



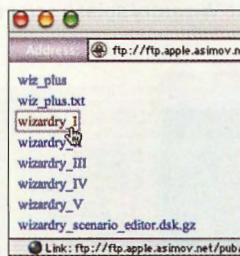
If you want OSXII to work, move the **Apple.ROM** and **DISK.ROM** files to the **Roms** folder.

4 Add 'Em to the Emulator After you download and decompress everything you want, move the disk images to the `Disks` folder inside the `OSXII` folder. With the Wizardry packages, make sure you decompress the individual files within each folder too, or you won't be able to use them. The `Disks` folder contains five category folders—a `System` folder, three game folders, and a programming folder. File your disk images in the appropriate category (or not—hey, it's your machine). OSXII comes equipped with a few disk images in each category, so even if you don't download anything, you'll still have something to do.

As you can see, we really like the Wizardry series—we stuck all the files in OSXII's Role Playing Games folder inside the Disk folder.



3 Snag Some Software Now comes the fun part—choosing software for your new virtual Apple II machine. If you've got Apple II software, convert your floppies into disk images using Disk Copy and a floppy disk drive. Or download software—again, read "The Legal ROMifications." That said, Asimov's Apple II archive (ftp://ftp.apple.asimov.net/pub/apple_II) has one of the biggest collections on the Web. Click the `Images` link; from there, select any software category (and subcategory), and download the disk images you want to use (and to which you have legal rights). Ah, Wizardry! Download this game by clicking `Games`, then `RPG`, and then Control-clicking `wizardry_I` and selecting `Download Link To Disk` from the contextual menu.



Asimov's Apple II site includes hundreds of disk-image downloads, including our prized Wizardry files.

5 Pick Your Preferences Now that you have the requisite files, you're ready to rock. Double-click the OSXII emulator to fire up a main screen that displays Apple's prehistoric machine and a retractable disk drive panel on its right. If this panel doesn't appear, click the bitty black Apple logo in the upper-right corner to open it. This is where you'll "insert" disks in the emulator's "drive" to run an app. Use the check boxes at the screen's bottom to select preferences. The `Scanlines` box sets whether to show scanlines in the display. `Caps Lock` toggles letter caps on or off. `Color` lets you choose whether to show a color display (check the box) or a classic green display (uncheck it). `Sound` controls whether sound is enabled. For the full retro experience, we unchecked the `Scanlines` and `Color` boxes.



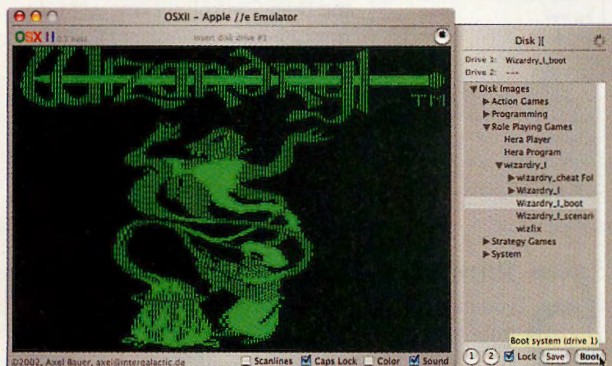
For a trip down memory lane, set OSXII to not show scanlines and display everything in its classic glory.

STUCK ON
THE START
SCREEN?
READ THE
MANUAL

For the uninitiated, Wizardry: Proving Grounds of the Mad Overlord is a role-playing game where you lead a party of up to six adventurers in search of the evil wizard Werdna (try reading that name backward). Summoned by the Mad Overlord Trebor (same name trick), you journey through a ten-level dungeon maze on a quest to find Werdna and return the amulet he stole from Trebor.

When you first fire up the game, you'll need to visit the training grounds to create some characters, and then go to the castle to gather them into a party. There you can equip your characters, let them rest (and gain levels), and heal them. Once you're set, go to the edge of town and down into the maze. But you knew all this because you read your original game's manual, right?

6 Lock and Load Time to roll. To play Wizardry, you need to boot a master disk (keep this locked to avoid writing over it when you save games) and a scenario disk. In the disk drive panel, click the disclosure triangle next to the category folder where you filed the Wizardry disk image (Role Playing Games, we assume). This displays a list of all disk images in that folder. Click the disclosure triangle next to Wizardry, select Wizardry_I_boot from the list, and check the Lock box. Click the 1 button to load the disk into Drive 1 in locked mode, and then click Boot to launch Wizardry. The main screen displays the boot process, and then the Wizardry splash screen when it's done loading.




If you loaded the boot disk properly, Wizardry's animated splash screen appears.

7 Go Play Press Return on your keyboard to exit the splash screen and display the startup screen. Press S to start playing the game. The screen instructs you to insert the Scenario Master in Drive 1; select Wizardry_I_scenario in the disk drive panel, uncheck the Lock box, and click the 1 button to load the scenario disk into the virtual disk drive. Then press Return. Congratulations—you made it! You're now ready to play Wizardry just like you used to on your old-school hardware. To save your progress, click Save at the bottom of the disk drive panel so you can pick up where you leave off. Ready, Tiltowait!



It ain't pretty (yet), but this start screen shows that Wizardry is alive and well and running in OS X—in a virtual Apple II machine.

 Emory Christensen is a freelance writer who gets his kicks with Macs of all stripes. He recently had the misfortune of causing a motherboard fire—no joke—with an improperly configured G4 upgrade.

EMULATORS FOR EVERYONE

Do a quick search for *emulator* on VersionTracker (www.versiontracker.com), and you'll find tons of emulators for a wide range of machines. So if the Apple II doesn't exactly rock your world, maybe a different machine will. Whether you want to run software in a different computing environment or you got game, here's a list of some computers and game systems as well as their software emulators. Also check out Emulation.net (www.emulation.net)—a site devoted to emulation on the Mac—for downloads.

COMPUTER EMULATORS

SYSTEM	EMULATOR
680X0 Macs	Basilisk II, vMac
Amstrad CPC	CPC++
Apple II	OSXII, Virtual, KEGS
Atari, Amiga, Apple II, Nintendo, TRS-80, and many, many others (the list is truly astonishing!)	MacMESS
Atari 800	Atari 800, Atari 800MacX
Atari ST	Hatari, NoStalgia
Commodore 64	Frodo, Power 64, sixtyforce
Commodore Amiga	MaxUAE
Commodore VIC-20	Power 20
IA-32 (x86) PC	Bochs
SAM Coupe 512K	SimCoupe
Thomson MO5	MO5
Thomson TO8	TEO
Windows	OpenOS X WinTel (based on Bochs)

VIDEO GAME SYSTEM EMULATORS

SYSTEM	EMULATOR
Atari 2600	Stella
Atari 5200	Jum52
Atari Lynx	Handy
CHIP8	Crazy-8
Game Boy/Game Boy Color	gnuboy, KiGB
Game Boy Advance	Boycott Advance, VisualBoyAdvance
MSX	fMSX, Zodiac
Neo Geo	GeoMAME (based on MacMAME)
Neo Geo Pocket Color	Neopocott
Nintendo 64	Mupen64
Nintendo (NES)	RockNES
Nintendo Virtual Boy	ViBE
Odyssey	O2Em
Oric-1/Oric Atmos	Oric
PC Engine	TGEmu
Sega Arcade	Modeler
Sega Genesis	Generator, Genesis Plus
Sega Master System and Game Gear	SMS+
Super Nintendo	SNES9X, SNES9X Converted
Wonderswan	Oswan



D I G I T A L L I F E S T Y L E O U T F I T T E R S

Making the iPod an Integral Part of Your Digital Lifestyle...

On the Road...



TransPod FM

The Only All-In-One Car Solution for New 3G iPod

COMING FALL 2003

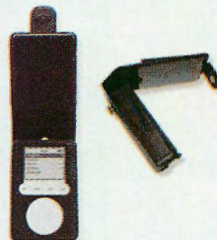
On the Run...



Action Jacket

- :: Sporty Neoprene Jacket
- :: Fits New 3G iPod

In the Office...



Executive Podfolio

- :: Stylish Leather Organizer
- :: Fits New 3G iPod

On the Town...



Podfolio

- :: Stylish Leather Jacket
- :: Fits New 3G iPod

Everywhere...



Jam Jacket

- :: Translucent Silicone Jacket
- :: Fits New 3G iPod

MacAddict

Welcomes...

These new Mac Addict Advertisers.

Mac SkinzPg.91
Custom covers for your Mac to match any personality!

Macro EnterPg.87
Large printing solutions and CAD software for OSX

Sasha Zand RecordingPg.91
Singer, Songwriter of alternative modern rock

LA Computer CompanyPg.92
One stop Apple shop

Join them...

In the November 2003 issue of MacAddict

Ad Space closeAugust 26

Materials dueSeptember 2

On-sale dateOctober 14

Did you know?

- **75%** of our audience have bought product/service from our advertisers
- **36%** have made an unplanned Mac or Mac-related purchase
- **57%** have recommended a product or service to a friend or associate
- **88%** have visited an advertiser website

Contact your Ad Manager today!

Ana Epstein

Direct Sales-Ad Mgr

(415) 656-8416


ana@macaddict.com

Advertiser Index

Advertiser	Contact	Page
Academic Superstore LLC	(800) 294-4035	93
ackNOWLEDGE	www.iskinprotect.com	91
Acme Made, Inc	www.acmemade.com	88
Apple Computer	www.apple.com	C2-pg 1
Applelinks	www.ThinkDifferentStore.com	91
Aspyr Media	(512) 708-8100	6, 39, 59
Batista.org	www.batista.org	90
Broadway Photo	(800) 951-9542	85
Canto Software	www.canto.com	92
Coast to Coast Memory	(800) 4-Memory	90
Crucial Technology	(800) 932-4995	9
Destineer Studios	www.destineerstudios.com	13
Digital Lifestyle Outfitters	(919) 382-3227	71
Dr. Bott, LLC	(877) 611-2688	73
DriveSavers	(800) 440-1904	87
Fatcow Web Hosting	(800) 925-2184	90
Griffin Technology	(615) 255-0990	40
IK Multimedia	(772) 466-9763	89
Inkfarm.com, Inc.	(800) ink-farm	92
InnoTech	(877) 858-7722	90
Intego	www.intego.com	C3
Jiiva, Inc.	www.superscrubber.com	53
LA Computer Company	(714) 630-8200	92
LakeWood Studios	www.lakewoodstudios.com	88
Leister Productions	(717) 697-1378	88
Lind Electronics, Inc.	(800) 897-8994	93
Mac Connection	(800) 998-0031	74-75
Mac Experts	(866) mac-xprt	19
Mac Solutions	(800) 873-3RAM	86, 92
Mac-Pro Systems	(800) 525-3888	88
MacMall	(800) 965-3282	76-77
MacofAllTrades	(800) 304-4639	88
Macro Enter Corporation	800-622-7568	87
MacSkinz	www.macskinz.com	91
MacWarehouse	(800) 981-9192	2-3, 4-5
MacWireless	(510) 848-7126	91
MacZone	(800) 304-0286	82-83
Marathon Computer, Inc.	(800) 832-6326	93
MarkSpace	www.markspace.com	93
MarWare, Inc.	(954) 927-6031	65
MegaMacs	(918) 664-MEGA	91
Memory.com	(866) 563-6679	91
MicroMat Computer Services	(800) 829-6227	C4
Monitor Frames for iMac	www.imacframes.com	88
Other World Computing	(800) 275-4576	78-81
Power Max	(800) 613-2072	84
PowerOn Computer Services	(800) 673-6227	87, 90
Prosoft Engineering, Inc.	www.prosoftengineering.com	57
RAMJET, Inc.	(800) 355-4569	90
REAL Software	(512) 263-1233	11
Sash Zand Recording	www.sashazand.com	91
SoWhatSoftware	(800) 307-0663	91
Sprysoft	(800) 840-6786	88

A REVOLUTION in Connectivity!



 Corinex Communications

Ethernet Through Electrical Outlets!

This unique technology offers users a wide range of networking options by using existing home power lines, enabling up to 14 Mbps data transfer rates!

navipod™



Control your iPod's audio functions from across the room with this distinctive 5-button infrared remote and receiver!



Fire-i Camera

Works with iChat AV!

Fire-i measures 2.5 inches and weighs just over 2 ounces!



unibrain



Dr. Bott OFF

Contact your local RESELLER to purchase Dr. Bott products.
www.drbot.com Toll Free: 800.541.1230 503.582.9944

MacConnection®



Authorized
Reseller

Simplify Your Life! ***with more storage from MacConnection***

Choose from over 100,000 Products

If it stores, moves, shares, or restores Mac files, we have it at great low prices.

Talk to Dedicated Mac Experts

We'll help you manage your ever-growing digital universe. Got questions about removable media, portable drives, backup systems, or network storage? Call us! We live and breath this stuff –and we're very friendly.

Get Everything Overnight™

Order in-stock items by 2:00 a.m. (ET) or custom systems by midnight and still get them the next day.



Your Full-Service Storage Provider

- Disaster recovery strategies
- DAS, NAS, and SAN solutions
- Certified SAN architects
- Advanced pre- and post-sales technical support
- State-of-the-art, in-house storage lab
- On-site installation and integration



NEW
500GB Big Disk

- Dual FireWire 800 & USB 2.0
- 800Mbps & 480Mbps transfer

#434324 **\$849**





40/80GB
DLT IV Tape

#56841 **\$43⁹⁵**



200/400GB
LTO II Tape

#421457 **\$114⁹⁵**





DUAL FIREWIRE / USB 2.0 INTERFACE

- 4MB/sec. native, 12MB/sec. compressed transfer rate
- 3-Year warranty

35/90GB AIT-1
Tape Drive

#433175 **\$859**





**SIMULTANEOUS SUPPORT
MAC, WINDOWS, LINUX & UNIX**

- Sleek 1U design –simple installation
- RAID 5, 1, 0 + hot spare capabilities

720GB NAS Server 4500

#445703 **\$5399**

NEW
Power Mac G5
with up to 1GB
FREE Memory

NEW!



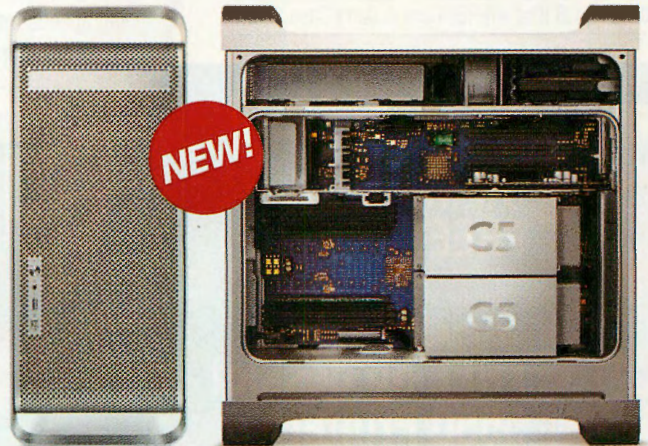
Apple iSight Camera

The Eyes and Ears of iChat

- Full motion video at 30fps and 24-bit color
- Dual-element microphone
- Stylish, compact aluminum body

\$149⁹⁵ #451228

NEW!



Starting at \$1994** 1.8GHz #453235

Apple Power Mac G5

- Up to dual 2GHz PowerPC G5 64-bit processors
- Up to 8GB of 128-bit DDR SDRAM
- AGP 8X Pro graphics

2GHz PowerPC G5

- 512MB + **FREE 1GB** = 1.5GB DDR 400 SDRAM
- 160GB Serial ATA HD
- 1 FireWire 800, 2 FireWire 400, and 3 USB 2.0 Ports

\$2994** #453237

* For memory installation \$29.95 fee applies.

** Price after \$100 rebate.

LACIE



NEW

- Dual format DVD+/-RW
- Burns/plays DVDs and CDs • 4.7GB capacity

#448642 **\$299⁹⁵**

FUJIFILM

ONLY \$1⁹⁹ PER DISK!



Fuji 4.7GB DVD+R 25-Pack

#422014 **\$49⁹⁵**

Maxtor

SAVE \$30**



OneTouch BACKUP

250GB Personal Storage 5000XT

- Dantz Retrospect Express software is included

#414319 **\$319^{95**}**

**after \$30 mfr. rebate expires 9/30

iomega



SAVE \$50*

- 400Mbps FireWire interface

#365018 **\$139^{95*}**

*after \$50 mfr.'s rebate expires 9/30

**The Best Place For
Macs Since 1984**

800.998.0031

macconnection.com

The all-new Apple iPod!

Carry up to 7,500 songs anywhere!

- Ultra-portable 10, 15 or 30GB HD
- Holds contacts, calendars, to do lists and text notes
- 8-hour lithium ion battery
- Windows compatible versions also available



NEW Apple iPod

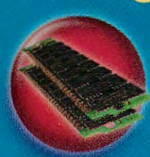
starting at ...

\$294 #158577

New Apple iPod Series

#158577 10GB iPod	\$294
#158580 15GB iPod w/FREE Dock & Carry Case	\$394
#158582 30GB iPod w/FREE Dock & Carry Case	\$494

Savings at MacMall!



up to
**512MB RAM
FREE!** (Up to a \$300
Instant Value!)

Available with purchase of select Apple® computer models. \$39.99 installation fee applies.



MacMall Exclusive!
**FREE hp deskjet
5550 Printer!** (\$99 Value!)

With purchase of any Apple computer after mfr. mail-in rebate. Offer valid through 9/27/03. #579211



MacMall Exclusive!
FREE USB Floppy Drive!*

With select iMac or eMac purchase. See below for details. After \$44.99 mail-in rebate. #117660



MacMall Exclusive!
**FREE Notebook
Carrying Case!***

With any 12.1" or 15.2" PowerBook or iBook purchase. After \$29.95 mail-in rebate. While supplies last. #882187



MacMall Exclusive!
FREE Software!

Free Total Training for Apple OS X #139546 with any order while supplies last. Free MYOB FirstEdge with any Apple computer purchase. Additional processing fees apply. #638065

Apple iBook G3 Features:

- Up to 900MHz PowerPC G3 processor
- Up to 40GB Ultra ATA HD
- Up to 256MB
- CD-ROM or Combo drive (DVD-ROM/CD-RW)
- 12.1" or 14.1" TFT XGA display

New Power Mac G5

The world's first 64-bit personal computer with speeds up to dual 2GHz!

The new Apple Power Macintosh® G5 is the world's fastest personal computer and the first with a 64-bit processor.

It features speeds up to an amazing dual 2GHz with a new ultrahigh-band width system architecture featuring AGP 8X Pro graphics and PCI-X that delivers a new breakthrough in desktop processing power.

PCI-X expansion!

The Power Mac G5 comes with three PCI-X slots, giving you the newest advance in PCI technology. The PCI-X protocol is perfect for high-performance PCI devices, increasing speeds from 33MHz to 133MHz and throughput from 266Mbps to 2Gbps.

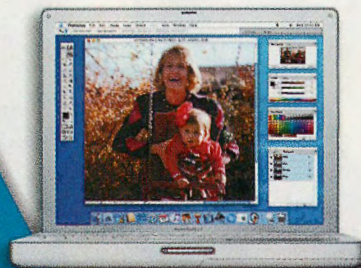
High-speed Pro graphics bus!

Compared with the AGP 4X interface, the Apple Power Mac G5 model's AGP 8X Pro graphics bus effectively doubles the maximum transfer rate and the amount of data transferred in a single AGP bus cycle.

The 66MHz AGP 8X Pro bus strobes 8X per clock cycle, achieving a 533MHz data rate and a maximum bandwidth of 2.1GB per second.

Designed for whisper-quiet operation!

It features an enclosure that houses four discrete thermal zones to compartmentalize the primary heat-producing components. Fans in the zones spin at very low speeds resulting in a system three times quieter than the Power Mac G4.



12.1" PowerBook G4

starting at ...

\$1,594

FREE AirPort
Extreme Card†

Apple PowerBook 12.1" Series 12.1" PowerBook G4 Features:

- 867MHz PowerPC G4 processor
- 12.1" TFT XGA active-matrix display
- 256MB SDRAM
- 40GB hard drive
- Combo drive (DVD-ROM/CD-RW) or SuperDrive
- NVIDIA GeForce4 420 Go graphics card with 32MB of DDR SDRAM
- Provides 1 FireWire® 400 and 2 USB ports

Apple 12.1" PowerBook G4 Series

#116413 867MHz G4/12.1"/256MB RAM/Combo	\$1,594*
#116411 867MHz G4/12.1"/256MB RAM/SuperDrive	1,794*

Most affordable Mac notebook ever!

The stylish Apple iBook® G3 fits easily into your lifestyle! With its extra long battery life, compact size, up to 900MHz PowerPC G3 processor and ultralight weight, the totally portable iBook is able to accompany you everywhere!

Apple iBook G3

starting at ...

\$994

#157425

Includes
iLife software
applications that
lets you get creative
with pictures, music,
movies and more!



New!

Apple iBook—
now up to
900MHz!

- 10/100Base-T Ethernet networking
- 56K modem
- AirPort ready
- ATI Mobility Radeon 7500 graphics card with 32MB DDR SDRAM

Apple iBook G3 Series

#157425 800MHz G3/12.1"/384MB Total*/CD-ROM	\$994*
#157426 900MHz G3/12.1"/384MB Total*/Combo	\$1,294*
#157428 900MHz G3/14.1"/640MB Total*/Combo	\$1,494*

from Apple!



Authorized Reseller

PowerMac G5 Features:

- Up to dual 2GHz PowerPC™ G5
- Up to 512MB DDR SDRAM
- Up to 1GHz per processor
- Up to 160GB Serial ATA; 7200RPM
- 8X AGP Pro graphics NVIDIA GeForce FX 5200
- Ultra or ATI RADEON 9600 Pro graphics each with 64MB DDR SDRAM
- Three open full-length 33MHz, 64-bit PCI slots or three open full-length PCI-X slots

Whisper-quiet operation:

Houses cooling fans that spin at low speeds resulting in a system that's 3X quieter than the Power Mac G4!

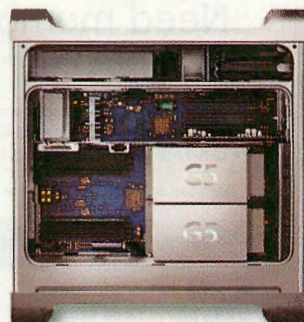
Built-in growth potential:

A removable side door lets you access slots and bays so you can add more memory, a second hard drive or an AirPort Extreme Card!

NEW! Power Mac G5

starting at
\$1,994

#242082



New Apple Power Macintosh G5

242082	1.6GHz G5/256MB RAM/80GB Hard Drive/SuperDrive	\$1,994
242104	1.8GHz G5/512MB RAM/160GB Hard Drive/SuperDrive	\$2,394
242106	2.0GHz G5 Dual/512MB RAM/160GB Hard Drive/SuperDrive	\$2,994

Apple PowerBook G4—the world's first 17" widescreen with a SuperDrive!

The first thing you'll notice about the world's first widescreen notebook computer is its 17" display, the largest ever in a notebook. When open, it's as fast. This breathtaking display offers the same viewing area as a 19" CRT monitor.

DVD players. The SuperDrive also lets you use iTunes™ to burn your own music CDs & the Disc Burner feature in Mac OS® X to burn data CDs.



The legendary SuperDrive!

Your Apple PowerBook® G4 with SuperDrive™ (DVD-/CD-RW) comes loaded with DVD™ software and can be used to burn DVDs which can be played in most consumer

17" PowerBook G4

only
\$3,294

*FREE 512MB Extra RAM

Apple PowerBook G4 Features:

- 15.2" or 17" widescreen active matrix display
- 867MHz or 1GHz PowerPC G4 processor
- Up to 512MB DDR SDRAM
- Up to 60GB HD
- Combo or SuperDrive
- Provides one FireWire® 400, one FireWire 800 (17" model) and two USB ports

Apple PowerBook G4 Series

#764348	867MHz G4/15.2"/768MB Total*/Combo	\$1,994*
#766962	1GHz G4/15.2"/1GB Total*/SuperDrive	\$2,594*
#116409	1GHz G4/17"/1GB Total*/SuperDrive	\$3,294*

Go Wireless with AirPort Extreme Base Station†† with Modem

only **\$249**
#114811

AirPort Extreme Base Station without Modem

only **\$194** #114796

NEW! Apple iSight

Autofocus video camera plus microphone!
only **\$144.94**
#242109

Apple Final Cut Pro 4

FREE Inside Editing with Final Cut Pro 4 Training DVD

only **\$994**
#194919

Adobe® Design Collection 7.0

with FREE Total Training for InDesign 2.0

only **\$1,199**
#175626

Adobe Acrobat 6.0 Professional

Adobe Acrobat provides advanced control of document exchange and output!

upgrade only **\$139.99**
#145056

#145051	Acrobat 6.0 Pro (Full)	\$389.99
#145972	Acrobat 6.0 Standard Upg.	\$89.99
#145062	Acrobat 6.0 Standard (Full)	\$269.99

NEW! Norton SystemWorks 3.0

The new version of Systemworks is the smartest way to solve your computer problems. It includes Norton Antivirus™ 8.0 and additional utilities to back up your data and more! Maximize the performance of your Mac and remove viruses—automatically!

symantec.

as low as

\$69.99

#180518

After \$50 mfr.

upg. rebate.

Price before rebate \$119.89.



LACIE



200GB d2 FireWire Hard Drive

7200RPM; 8MB buffer cache; 10ms average seek time

only **\$449**
#139310

NEW! QuarkXPress 6.0



upgrade as low as **\$199**
#236682 (from version 5.0)

FREE RAM OFFER—All models require an additional \$39.99 professional installation fee. RAM is free after \$49.95 MacMall mail-in rebate for iMac G4 models. Offer expires 9/30/03. **†FREE AirPort Extreme Card OFFER**—Available on #116413 and #116411. An additional \$39.99 professional installation fee applies. **††Requires AirPort Extreme Ready System**—AirPort Extreme ready systems are those with mini-PCI support form factor. AirPort Extreme cards cannot be used in older AirPort card bays (PCMCIA form factor slot). *****FREE USB FLOPPY DRIVE**—USB Floppy Drive is FREE after redemption of \$44.99 MacMall mail-in rebate. Price before rebate is \$44.99. *****FREE Carrying Case OFFER**—Carrying Case is FREE after redemption of \$29.95 MacMall mail-in rebate. Price before rebate is \$29.95. While supplies last. *****FREE SOFTWARE OFFER**—Free MYOB FirstEdge requires an additional \$9.95 processing charge. While supplies last. Free Total Training for Mac OS X requires an additional \$12.99 processing charge. While supplies last. *****FREE PRINTER OFFER**—hp deskjet 5550 printer is free after \$99 Apple mail-in rebate with purchase of any Apple computer and any hp deskjet printer priced at \$99 or more (such as the deskjet 5550), or save \$99 on any hp photosmart or all-in-one unit price at \$149 or more. Offer valid through 9/27/03. Price of hp deskjet 5550 before rebate or without qualifying purchase is \$99.

Mention Code ZMM03MADT9

1-800-MACMALL or visit macmall.com
(622-6255)



Other World Computing

Serving the Mac Universe since 1988

Excellent service / Competitive prices / Quality products / Expert tech staff



visit macsales.com

800.275.4576

PowerBook G3 & iMac 233-333MHz

OWC PC100 Low Profile lets you max your memory at up to 512MBs! GREAT for OS 9 & OS X!

Low Profile 256MB will install in lower memory slot of all listed models allowing a new max memory of up to 512MBs!



iMac Rev A-D

G3 Wallstreet '98

128MB PC100 CL2/PC66 Low Profile SO-DIMM \$29.99

256MB PC100 CL2/PC66 Low Profile SO-DIMM \$64.99

Legacy Macs

Go up to 512MB, 1GB, or MORE! Perfect for Memory Starved Applications & OS X!

128MB Mac 5V

DIMM ONLY \$25.99!



iMac G4/1GHz, PowerBook G4 12/17"



PC2100 DDR 266MHz SO-DIMM for PowerBook G4 12", iMac G4/1GHz models
256MB .. \$43.99 512MB .. \$87.99

PC2700 DDR 333MHz SO-DIMM for all PowerBook G4 12" & 17", iMac G4/1GHz
256MB .. \$45.99 512MB .. \$89.99

More storage for PowerMacs!



30GB Maxtor DiamondMax \$59.95

ATA/133, 5400RPM, 2MB buffer, 1yr warranty

80GB IBM/Hitachi Deskstar 180XP \$89.99

ATA/6, 7200RPM, 2MB buffer, 3yr warranty

120GB IBM/Hitachi Deskstar 180XP \$115.99

ATA/6, 7200RPM, 2MB buffer, 3yr warranty

180GB IBM/Hitachi Deskstar 180XP \$175.99

ATA/6, 7200RPM, 8MB buffer, 3yr warranty

250GB Western Digital Caviar \$329.99

ATA/6, 7200RPM, 8MB buffer, 3yr warranty

ATA/IDE PCI cards

ADD a FAST ATA/133 HD Interface to ANY Mac with a PCI Slot
Supports up to 4 ATA/IDE drives, data rates up to 133 MB/S!
100% Compatible and Bootable Apple OS 8.x, OS 9.x, OS X 10.x



Sonnet Tempo ATA/133
Mac PCI controller \$87.99

Plug and Play, 3 year warranty



SIIG ATA/133 Mac
PCI controller only \$75.99!
Plug and Play, 5 year warranty



SIIG Dual Channel ATA/133
RAID PCI controller \$139.99!
Hardware RAID card for HIGH
performance, 5 year warranty

OWC takes the guesswork out of upgrading

Need memory?

Make your Mac run faster with a memory upgrade from OWC!

- Lifetime Advance Replacement Warranty
- Fully meets or even exceeds Apple specs
- UPS/FedEx AIR Delivery from \$4

Don't See Your Mac Listed? Call or Visit www.MacSales.com!

NEW PowerMac G5 'Aluminum'

PC2700

333MHz DDR CL2.5 for 1.6GHz

512MB \$89.99 1GB \$CALL

PC3200

400MHz DDR CL3.0 for 1.8GHz, Dual 2.0GHz

512MB \$109.99 1GB \$CALL



PowerMac G4 'Mirrored Door' & 'FW800'

PowerMac G4 'Mirrored Door' Dual 867MHz /
1GHz / 1.25 GHz; 'FW800' 1GHz, Dual 1.25GHz,
Dual 1.42GHz; & all Xserves

PC2100

266MHz CL2.5 DDR G4/1GHz, G4/867MHz Dual

256MB \$42.95 512MB \$85.95

PC2700

333MHz CL2.5 DDR G4/1.25GHz;

Dual 867MHz/1GHz/1.25GHz/1.42GHz

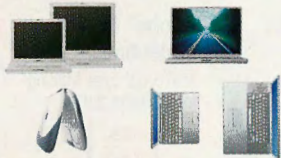
256MB \$45.99 512MB \$89.99



Hard Drive Solutions for your Mac

2.5" drives for Apple laptops!

Upgrade to
a bigger,
faster,
quieter drive
today!



60GB IBM/Hitachi 7K60 7200RPM \$359.99

The first 7200RPM 2.5" drive ever! Quieter and uses
less power than many 5400RPM and older 4200RPM drives!

20GB Fujitsu MHS2020AT \$99.95

4200RPM, 2MB buffer, 3yr warranty

40GB Toshiba MK4019GAX \$139.95

5400RPM, LARGE 16MB buffer, 3yr warranty

60GB IBM/Hitachi 80GN \$199.95

4200RPM, 2MB buffer, 3yr warranty

60GB Toshiba MK6022GAX \$259.95

5400RPM, LARGE 16MB buffer, 3yr warranty

80GB IBM/Hitachi 80GN \$289.99

4200RPM, LARGE 8MB buffer, 3yr warranty

Power Mac G4 AGP, iMac G3 350+, eMac

All PowerMac G4 Sawtooth / Graphics / Gigabit
/ Digital Audio/ Quick Silver I&II Models
including Dual Processor Equipped; iMac
G3/350-700MHz Models, All eMac G4 Models



256MB PC133 CL3 / PC100 CL2 SDRAM \$35.99

512MB PC133 CL3 / PC100 CL2 SDRAM \$89.99

iBooks, PowerBook G3/G4, iMac G4

All iBooks, all iMac G4 15", iMac G4 17"
800MHz, all PowerBook G4 15" (Titanium),
PowerBook G3 FireWire(yr2000/aka Pismo)

Get up to 1GB



256MB PC133 CL3/PC100 CL2 SO-DIMM \$37.99

512MB PC133 CL3/PC100 CL2 SO-DIMM \$89.99

PowerMac G3, G4 'Yikes' PCI

All G3 Beige, Blue & White, G4 PCI 'Yikes'



PC100 CL2/PC66 SDRAM
SPECIAL!
256MB \$29.99

Internal CD/DVD for PBs/PMS

G4 Cube - PowerMac G4 15" - iMac 350 - 700MHz

Internal CD-R/RW + DVD-ROM upgrade \$199.99

Burn CDs & Play DVDs with this 100% Apple Compatible
Internal Slot Loader!

PowerMac G3 & G4 Desktop/Towers Lite-On

52x24x52x ATAPI CD-R/RW \$49.99

Pioneer DVR-105 'SuperDrive'

CD-R/RW + DVD-R/RW \$189.99

Build your own FW/USB drive

Kits include all connecting cables and driving mounting screws.

For 2.5" ATA Solutions:
OWC Mercury Express cases

USB 1.1/2.0 \$35.99

FireWire 400 \$49.95

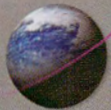


For 3.5" ATA Solutions:
OWC Mercury Elite cases

Combo FireWire FW400/USB \$89.95



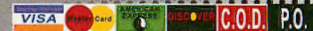
Combo FireWire 400/800 +
USB 1.1/2.0 \$159.95



Other World Computing

Serving the Mac Universe since 1988

Excellent service / Competitive prices / Quality products / Expert tech staff



visit macsales.com
800.275.4576

OWC Mercury Elite FireWire & USB 2.0 storage

The OWC Mercury Elite Series delivers Highly Reliable, High Performance Storage at the best possible prices!

All OWC Mercury Elite solutions feature:

- Cool Blue LED Activity Indicator • Super quiet operation • Large 2MB or 8MB Data Buffer • Fully suitable for Digital Audio/Video • Ship pre-configured plug and play for Mac OS 8.5.1 - 9.2.2 & OS X • Intech Speedtools Mac Utility Software Included • Fully compatible with Windows & Unix OS versions that support FireWire or USB • Full 2yr warranty

Standard features for Mercury Elite FW400 + USB 2/1.1:

Custom Oxford911 Bridge Solution • Sustained Data Rates up to over 40 Megs/second • Two 6 Pin FireWire 1394a FW400 Ports • One standard USB 2.0/1.1 Port • (1) 6 to 6 FireWire and (1) USB 2.0/1.1 36" connecting cables

Standard features for the Mercury Elite Pro FW800 + USB:

Custom Oxford922 Bridge Solution • Sustained Data Rates up to over 55 Megs/second • Fully backward compatible to FW400 1394a • Two 9 Pin FireWire 1394b FW800 Ports • One 6 Pin FireWire 1394a FW400 Port • One standard USB 2.0/1.1 Port • (1) 9 to 9 pin FW800, (1) 6 to 6 pin FW400 and (1) USB 2.0/1.1 36" connecting cables

MyMac.com review 5 out of 5

MacAddict 'Great' Review 7/03

"...when opening a 2GB Photoshop file, The Mercury Elite Pro(FW800) opened it over 13 Percent faster than both the LaCie D2(FW800) and the 120GB Seagate Barracuda ATA V inside our....Dual 1.42GHz PowerMac."

James Coates of the Chicago Tribune:

"Mac users likely will just break into smiles when they plug this high speed hard drive into the FireWire ports on their machines."

Charles Carr from Computer Edge about buying an OWC Mercury drive: "You'll probably be happy you did." 4 out of 5. "The Elite is ideal for professionals and consumers who need convenient, portable storage for large amounts of data."



OWC Mercury On-The-Go 2.5" FW400/USB

Up to 80 gigs that fits in a shirt pocket!

All On-The-Go Drives Feature:

Powered by FireWire Bus or Included AC Power Adapter • Cool Blue LED Activity Indicator • Super Quiet Operation • Large Data Buffer up to 16MB • Fully Suitable for Audio/Video • Ship Pre-configured Plug and Play for Mac OS 8.5.1-9.2.2 & OS X • Intech Speedtools Mac Utility Software Included • Fully compatible with Windows & Unix OS versions that support FireWire • Weighs less than 12 Ounces! • All Cables, Carrying Case, and Full 1 Year Warranty included

Drive may be powered by FireWire Bus or with included power adapter.



XLR8yourmac.com gives 4.5 out of 5.



Photoshop User

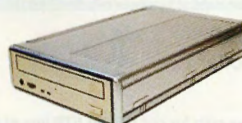


MacSofa: "It fits right in with the Mac look and is super silent and easy to set-up - you couldn't ask for a better drive! Mercury Elite receives a perfect score!"

OWC Mercury CD/CD-R/CD-RW - DVD/DVD-R/DVD-RW - FireWire + USB 2.0/1.1



High Speed for backup, audio, video and more - 100% Apple iTunes compatible! Plug and Play with any Mac or PC that has an available FireWire or USB port. How easy is that?



CD-R/RW External Solutions:

OWC Mercury FW+USB 52x24x52x CD-R/RW only \$129.99

Includes Roxio Toast Lite 5.2.x, 25 Pieces 52X 80 Min CD-R Media, 1 Piece 80 Min CD-RW Media, All Connecting Cables, 1 Year Warranty

DVD-R/RW & CD-R/RW 'SuperDrive' Solutions:

OWC Mercury FW+USB DVR-105 'SuperDrive' 4x2x12 DVD-R/RW + 16x8x32 CD-R/RW only \$299.95

Includes CharisMac Discrite 5.x, 5 Pieces DVD-R Media, 25 Pieces 52X 80 Min CD-R Media, 1 Piece 80 Min CD-RW Media, All Connecting Cables, 1 Year Warranty



Call or Visit www.MacSales.com for our full FireWire/USB line which also includes:

FireWire & USB add-on card from only \$19.99! Connect to thousands of new USB and FireWire Products!

FEATURE PRODUCT

Sonnet Tango \$83.99

2-port FW 400 & 3-port USB 2.0/1.1 PCI

Save a slot and add the latest USB 2.0+1.1 and FireWire support to any Mac with a PCI Slot! Compatible with Apple OS 8.6-9.2.x, OS X.

SPECIAL!

OWC 3-port FW 400 Mac PCI \$19.99

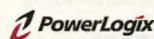
OWC 3-port FW 800/400 Mac PCI \$79.95

Plug and Play with any Mac that has an available PCI Slot. Requires Mac OS 8.6 - 9.2.2 or OS X. OS X 10.2.3 or higher required for FireWire 800 operation.



MacAllly 2-port USB 1.1 PCI Card \$24.95

Add USB to ANY Mac with a PCI slot, Plug and Play compatible with Apple OS 8.5.1 - 9.2.x and OS X



PowerLogix RapidFire 2 Port USB 3 Port FireWire PCI Card \$49.99

FireWire and/or USB lets you connect to the Apple iPod, Digital Cameras, Digital Camcorders, CD/DVD Burners, Hard Drive Storage, Keyboards, Mice, Scanners, Printers, and MUCH MORE! If your computer didn't come with one of these interfaces, they are easy to add so you too can plug and play USB & FireWire devices!





Other World Computing

Serving the Mac Universe since 1988

Excellent service • Competitive prices • Quality products • Expert tech staff



visit macsales.com
800.275.4576



Internet
access for
MACS
ONLY

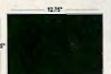
FasterMac.NET Nationwide 56K dial-up \$8.25 a month - \$99/yr!

5 FREE e-mail accounts • 10MB web space • FOR APPLE USERS ONLY!
Call 1-800-869-9152 or visit www.fastermac.net for info or instant sign-up.

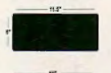
Protect your investment!

Protect your investment!

OWC Laptop Screen Protectors PREVENT marks on your PowerBook LCD Screen! FREE iKlear Apple Polish included for a 'Klean Start!'



OWC LSP PowerBook G4
Titanium 15" \$15.99



OWC LSP
Wallstreet/Lombard/Pismo \$14.95



OWC LSP iBook(all)/PowerBook G4 12" \$13.95



Laptop Carrying
Cases - HOT BUY!

Avalon Executive II \$39.95

The best value in a top-quality, shock protective, laptop case for all laptops with up to a 15.4" screen

macsales.com/music



Create exciting music tracks with this virtual rack full of synths, loop players, samplers, mixers, effects, sound/loop library and more... all inside your computer!

Generate compelling video and 'remix' your images with effects in real time in sync with any audio. DJ's, Bands/Artists, Clubs, Multimedia/Events producers, Visual Artists... See our music demos, articles, and more online. Visit www.macsales.com/music

arKaos

Mac Audio & Video

Contour Design USB
Shuttle Pro Controller
\$88.95



Call or visit www.macsales.com for our COMPLETE line of Mac Audio/Video hardware & software.

CompuCable Accessories

ADC to DVI adapter \$29.95
ADC to VGA adapter \$27.99
DVI to ADC video adapter \$79.99
OWC DVI to VGA adapter \$9.95



Call for keyboard/monitor switch (KVM) sets!



Apple OS X
10.2.X 'Jaguar'
\$49.99



Apple OS 9.1
from
\$39.99



YE Data 6 in 1 Digital Media
Reader/Writer \$29.99

- Reader + 128MB SmartMedia Bundle \$64.99
- Reader + 256MB Compact Flash \$89.99

Connects to your Mac via USB and lets you read/write Compact Flash, Smart Media, Memory Stick, SD Memory, MultiMedia Card, and Microdrive!

Asante Mac PCI 10/100BT Ethernet Card \$23.99

Step up to high speed Ethernet today!



Keyboards and Mice



MacAly Retractable Headphones
for iPod, etc \$19.99



MacAly Ice Mouse Optical
3-Button Scrolling \$29.95



MacAly IceCad USB Mini Graphics
Drawing Tablet w/Pen \$39.99



OWC Apple 7 in 1 Bit Kit \$7.95

Just what you need for installing memory or a hard drive and more for Apple Desktops, PowerBooks, iBooks/More

Mac PRAM Batteries



3.6V PRAM Replacement Battery \$5.99
High-Capacity 3.6V 1800mah Lithium Cell



4.5V PRAM Replacement Battery \$7.99
Genuine Rayovac 4.5v Alkaline computer battery

GriffinTech 'Cool Goodies'



Griffin PowerMate USB \$44.95
Rotary Audio Controller and more!

Griffin iMic USB

MicroPhone Adapter \$36.97



Protect your iPod or laptop

iSkin iPod and Keyboard protectors only
\$18.99 to \$19.99



Digital Accessories



UniBrain Fire-i FireWire Digital
Camera only \$99.95

Works with any Mac with an available FireWire port. Perfect for WebCam, video streaming,

ADS Instant DVD USB
MPEG-II \$229

Live Convert from ANY Video Source
into your Mac and Burn DVDs!



PowerBook Accessories



Roadtools Traveler CoolPad \$19.95
For PowerBook, iBook, For PowerBook, iBook, ANY-Laptop! Available in Black or White.



Roadtools Podium CoolPad \$29.95
For PowerBook, iBook, ANY-Laptop! Available in Black or White



OWC Mobility
Bundle #4 for
G4 PB \$54.95



Includes TIG4 LSP,
LapBottom, and
RoadTools
Podium(Black) - Save
25%!



OWC Mobility
Bundle #6 for
G4 PB \$49.95



OWC LSP for the
iBook Dual USB
RoadTools Podium
CoolPad Lapbottom
Products Lapbottom



OWC Bundles include top qualitymMedia from SanDisk! Call or visit our website for our full line of SanDisk Flash/Smart/Stick

Mac PowerBook Batteries

Apple PowerBook G4 Lombard (Bronze/99),
FireWire (Pismo/00) High Capacity Li-Ion \$149.99

Apple PowerBook G4 Wallstreet (1998) Li-Ion
Replacement Battery \$149.99



Other World Computing

Serving the Mac Universe since 1988

Excellent service / Competitive prices / Quality products / Expert tech staff



visit macsales.com
800.275.4576

PowerMac G4 Processor Upgrades

Make your Mac 2x, 3x, 4x, 5x, even 7x faster!

- See real world benchmarks at www.macsales.com/upgrades
- \$\$\$ OWC gives cash back for your old processor too! \$\$\$



G4 AGP Graphics / G4 Sawtooth



G4 Gigabit Ethernet



Digital Audio



G4 Cube



QuickSilver I



QuickSilver II



OWC

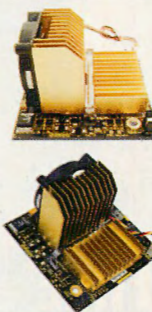
Mercury G4 Extreme

PowerMac G4 now

Your PowerMac G4 made EXTREME!

- Plug and play with all PowerMac G4 models 100/133 bus 350MHz to 1GHz (except Cube)
- Pre-installed cross-air heatsink means cool running and easy installation

G4/800MHz 2MB L3 SD cache **\$249.99**
G4/1.25GHz 2MB L3 SD cache **\$499.99**
G4/1.467GHz 2MB L3 SD cache **\$589.99**



SONNET
SIMPLY FAST

Macworld

G4/1.4GHz 2MB DDR L3 **\$CALL**
G4/1.2GHz 2MB DDR L3 **\$519.99**
G4/1.0GHz 2MB DDR L3 **\$409.95**
G4/800MHz 2MB DDR L3 **\$248.95**

Sonnet G4 Installation Kit \$27.99

NOTE: G4/1GHz model is not supported in Cube.

Make your PowerMac G4/350MHz - 1GHz model Simply Fast'er' with Sonnet!



Giga
DESIGNS

Macworld

G-Accelerator

All feature: 2MB L3 Cache

G4 1.4-1.467GHz **\$579.95**
G4 1.2GHz **\$469.95**
G4 1.0GHz **\$379.95**
G4 800MHz **\$269.95**

High-efficiency heat sink/fan pre-attached - easy install, Plug and Play!

Upgrade your PowerMac AGP model 350-1ghz (excluding Cube) today!



PowerLogic

PowerForce Dual G4 All feature: 2MB L3 Cache

Dual G4/1.4GHz **\$997.95**
Dual G4/1.2GHz **\$779.95**
Dual G4/1.0GHz **\$679.95**
Dual G4/800-867GHz **\$579.95**

The Power of Dual G4 - Just Plug and Play away!

Compatible with PowerMac G4 AGP models 350-1GHz (excluding Cube) with 100MHz or 133MHz system bus.

Upgrade PowerBook G3 to G4



NuPower Pismo G4/500MHz 1MB 2:1 **\$289.99**

newer technology

Crescendo WS G4/500MHz with 1MB 2:1 **\$395.99**

SONNET SIMPLY FAST



BlueChip LS G4/500MHz w/ 1MB 2.5:1 (Lombard) **\$375.99**

PowerLogic



<http://www.macsales.com/MyOWC>

Our online guide shows what we have just for your Mac!

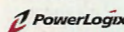
ZIF upgrades for PowerMac G3 Beige/B&W; G4 'Yikes' PCI



Macworld

G4/450MHz **\$189.94** • G4/500MHz **\$259.94**
G4/550MHz **\$319.94**

Plug & Play, 1MB L2 Cache, 2yr OWC Warranty



PowerLogic

G3/800MHz with 1:1 512k L2 cache **\$297.99**

G4/1GHz with 1MB L3 cache **\$569.99**

SONNET SIMPLY FAST

XpostFacto Software from OWC



Lets you use OS X 10.1 and later on many Macs Apple doesn't support!

Learn more here: www.macsales.com/OSXCenter

Apple OS X 10.2.x

'JAGUAR'
from
\$49.99!



Don't let a slow video card hold your Mac back!



Perfect for Apple OS X and Quartz Extreme

Apple / NVIDIA GeForce 4MX 32MB for PowerMac G4 AGP **\$75.99**

Connect up to 2 displays, ADC/DVI/VGA displays supported. Resolutions up to 2048x1535

ATI Radeon 9000 MacEdition AGP w/64MB DDR for PowerMac G4 AGP **\$165.99**

Connect up to 2 displays, ADC/DVI/VGA displays supported. Resolutions up to 2048x1535

ATI Radeon 9800 Pro 128MB AGP 2x-8x MacEdition **Call of visit macsales.com**

Connect up to 2 displays, ADC/DVI/VGA displays supported. Resolutions up to 2048x1535

ATI Radeon 7000 MacEdition PCI w/32MB DDR for any PCI slot Mac **\$119.99**

Connect up to 2 displays, ADC/DVI/VGA displays supported. Resolutions up to 2048x1535

G3 & G4 PCI PowerMac Upgrades



Work faster, browse faster, play faster - even run OS X!

* For most PCI PowerMac models, does not use a PCI slot

* Plug and Play upgrades for 73/75/76/85/86/95/96, UMAX S900/J700, compatible PowerComputings

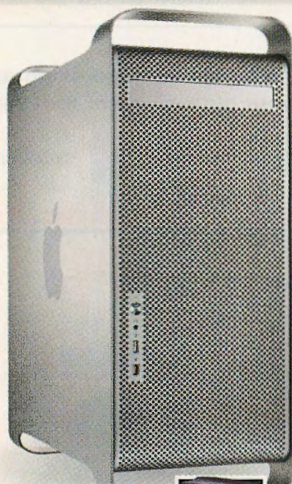
Crescendo G3/450MHz 1MB L2 only **\$139.95 * Limited Supply***

Crescendo G3/500MHz 1MB L2 **\$179.95**

Crescendo G4/700MHz 1MB L3 **\$297.99**

Crescendo G4/800MHz 1MB L3 **\$395.99**





NEW! Apple Power Mac G5 *The world's fastest personal computer*

The Power Mac G5 is the world's fastest personal computer, and the first with a 64-bit processor – which means it breaks the 4 gigabyte barrier and can use up to 8 gigabytes of main memory. Apple made the transition to 64-bit computing seamless: current 32-bit code, including Mac OS X, the Mac OS 9 Classic environment and existing applications, runs natively at processor speed with no interruptions to your workflow. The new G5 processor – available at speeds up to dual 2GHz with a new ultrahigh-bandwidth system architecture featuring AGP 8X and PCI-X – makes the Power Mac G5 a breakthrough in desktop processing power.

- 1.6GHz, 1.8GHz or dual 2GHz PowerPC G5 microprocessors
- 512K L2 cache (per processor)
- 3 open PCI slots (1.6GHz); 3 open PCI-X slots (1.8GHz and dual 2GHz)
- 1 FireWire 800 port, 2 FireWire 400 ports, 3 USB 2.0 ports, 2 USB 1.1 ports
- Built-in 10/100/1000Base-T Ethernet
- AirPort Extreme ready; Bluetooth option
- Mac OS X v10.2 "Jaguar"
- 90 days of telephone support and a 1-year limited warranty included

FREE*

hp 1115 PhotoSmart Printer – \$80 Value!

*After mfr. instant rebate with purchase of any new Apple CPU. Ask for item #195307 refurbished model. While supplies last.

1.6GHz **G5**

- 800MHz frontside bus
- 256MB DDR SDRAM
- 80GB hard drive
- SuperDrive DVD-R/CD-RW
- NVIDIA GeForce FX 5200 Ultra w/64MB DDR SDRAM

\$1994⁹⁸

#184142

1.8GHz **G5**

- 900MHz frontside bus
- 512MB DDR SDRAM
- 160GB Hard Drive
- SuperDrive DVD-R/CD-RW
- NVIDIA GeForce FX 5200 Ultra w/64MB DDR SDRAM

\$2394⁹⁸

#184143

2GHz Dual **G5**

- 1GHz bus per processor
- 512MB DDR SDRAM
- 160GB Hard Drive
- SuperDrive DVD-R/CD-RW
- ATI Radeon 9600 Pro with 64MB of DDR SDRAM

\$2994⁹⁸

#184144

Apple Instant Loan starting at only **\$46** per month

#168151 AppleCare 3-Year Protection Plan – Power Mac G5 \$249.99



Apple iBook G3

The most affordable Mac notebook ever!



FREE*

Up to 384MB Memory

*After rebate. See bottom of facing page for details.

800MHz G3

- 12.1" TFT Display
- 128MB Memory
- 30GB Hard Drive
- CD-ROM Drive
- ATI Mobility Radeon 7500 with 32MB VRAM

\$994⁹⁸

#184124

900MHz G3

- 12.1" TFT Display
- 128MB Memory
- 40GB Hard Drive
- Combo DVD/CD-RW Drive
- ATI Mobility Radeon 7500 with 32MB VRAM

\$1294⁹⁸

#184125

900MHz G3

- 14.1" TFT Display
- 256MB Memory
- 40GB Hard Drive
- Combo DVD/CD-RW Drive
- ATI Mobility Radeon 7500 with 32MB VRAM

\$1494⁹⁸

#184126

Apple Instant Loan starting at only **\$22** per month

#168153 AppleCare 3-Year Protection Plan – iBook G3 \$249.99

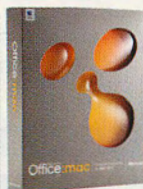
Mac Zone Is Your Single Source for the Latest Hardware & Software Products!



\$117⁹⁹

#869507

Great value in a half-gig
Kingston
512MB
CompactFlash
Memory Card



Designed specifically for
Mac OS X
Microsoft Office
v. X – Upgrade
\$249⁹⁹

#867522



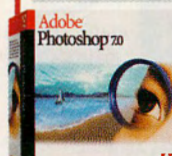
Less than
28¢ per disc
Fuji 24X 700MB
CD-R 100-Pack
\$27⁹⁹

#141962



5X faster than 802.11b
– 54 Mbps wireless
Apple AirPort
Extreme
Base Station
\$198⁹⁹

Card sold separately. #169636



Professionals' image editor
Adobe
Photoshop 7
Upgrade
\$134⁹⁷

#141955



Enhanced preflight
and preview tools
Adobe Acrobat
6.0 Professional
Upgrade from 4.x
and 5.x Standard
\$134⁹⁷

#187675



FREE tripod and carrying case!*

Canon ZR65
MiniDV Digital
Camcorder
\$599⁹⁹

#175367

*Ships with camcorder. While supplies last.



Edit video
like a pro!
Final Cut Pro
4 Upgrade
\$399⁹⁹

#184120



Don't forget your AppleCare

AppleCare
Protection Plan

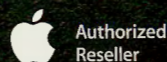
Starting at \$169⁹⁹ – Call for details.



Credit cards are not charged until the order is shipped. Most products ship the same day (barring system failure, etc.). Shipping options include Ground, 2nd Day and Overnight delivery. Freight is based on average product weight. Handling extra. Insurance available. Special orders may require special shipping and handling charges. Call for international shipping rates. Prices and product availability subject to change without notice. Specials and promotions may be limited to stock on hand. Not responsible for typographical errors. All products sold by Zones, Inc. are third party products and are subject to the warranties & representations of the applicable manufacturers. ©2003 Zones, Inc. All rights reserved. Unauthorized duplication is a violation of applicable laws. Apple, the Apple logo, Mac, Power Mac, PowerBook, iMac, iBook, AirPort, and FireWire are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. SuperDrive, iPod and eMac are trademarks of Apple Computer, Inc. AppleCare is a registered service mark of Apple Computer, Inc. PowerPC is a trademark of International Business Machines Corporation, used under license therefrom.

Power Macs! and we've got 'em!

Want the latest
news from
Macworld NY?
Visit maczone.com!



Top-Notch Layout

Meet your deadlines
without sacrificing design

QuarkXPress™ 6.0 – Full Version



- Mac OS X and Microsoft Windows XP native
- Improved table creation
- Multiple-level undo and redo
- Synchronized text – share content between layouts
- Direct PDF Export

\$869⁹⁶

#198901 Mac
#198902 Win

**Upgrades
Available –
Call Today!**

Apple PowerBook G4



*Three sizes,
from comfort-
ably small to
incredibly big*

867MHz G4	1GHz G4	1GHz G4
<ul style="list-style-type: none"> • 12" TFT Display • 256MB DDR Memory • 40GB Hard Drive • Combo DVD-ROM/CD-RW • NVIDIA GeForce4 420 with 32MB DDR SDRAM <p>\$200 Price Drop! \$1594⁹⁸ #169635</p>	<ul style="list-style-type: none"> • 15.2" TFT Display • 512MB DDR Memory • 60GB Hard Drive • SuperDrive DVD-R/CD-RW • AirPort Card Included • ATI Mobility Radeon 9000 with 64MB DDR SDRAM <p>\$2794⁹⁸ #159230</p>	<ul style="list-style-type: none"> • 17" TFT Display • 512MB DDR Memory • 60GB Hard Drive • SuperDrive DVD-R/CD-RW • AirPort Extreme Included • NVIDIA GeForce4 440 with 64MB DDR SDRAM <p>\$3294⁹⁸ #169634</p>

Apple Instant Loan starting at only **\$39** per month



Apple iMac G4

*Up to 1GHz,
17" LCD and
SuperDrive!*

FREE*
Up to 512MB Memory
*After rebate. See bottom of page for details.

800MHz G4	1GHz G4
<ul style="list-style-type: none"> • 15" TFT Display • 256MB Memory • 60GB UATA/66 Hard Drive • 32X Combo DVD/CD-RW Drive • 2 FireWire / 5 USB • 32MB NVIDIA GeForce2 MX <p>\$1294⁹⁸ #165464</p>	<ul style="list-style-type: none"> • 17" Widescreen LCD • 256MB Memory • 80GB UATA/100 Hard Drive • 4X SuperDrive DVD-R/CD-RW • 2 FireWire / 5 USB • 64MB NVIDIA GeForce4 MX <p>\$1794⁹⁸ #165465</p>

Apple Instant Loan starting at only **\$28** per month

#168152 AppleCare 3-Year Protection Plan – iMac G4 . . . \$349.99

Top Mac Products Available Online at maczone.com!

Perfect for high-volume backup
LaCie 120GB FireWire Ext. Hard Drive
\$209⁹⁹
#154800

Protect, backup & restore your files
Norton System Works 3.0 – Upgr.
\$79⁹⁹*
#188709
*After \$50 mfr. mail-in upgrade rebate. Low Zones price: \$129.99. Offer good through 7/31/04.

Reads and writes to six types of digital media.
Viking 6-in-1 USB FlashCard Reader
\$20⁹⁹
#991455

FREE 64MB memory card*
Nikon 3100 3MP Digital Camera
*Ships with camera.
\$349⁹⁹ #187692

Upgrade to a new collection of powerful tools
Adobe InDesign 2.0 – Upgrade
\$149⁹⁹
#141986

2-picoliter droplets for 2880 x 1440 resolution
EPSON Stylus Photo 960
\$299⁹⁸
#997896
*After \$50 mfr. mail-in rebate with purchase of Apple CPU. Low Mac Zone price: \$349.98. Offer good through 9/30/03.

NEW!
Apple iPods!
All your music, anywhere you go

- Lighter than 2 CDs
- Holds up to 7500 songs
- Blazing fast FireWire download connection
- NEW super-slim, ahead-of-the-curve design
- Also Windows compatible

#184128 10GB iPod* \$294.98
#184129 15GB iPod w/Dock \$394.98
#184130 30GB iPod w/Dock \$494.98
*Does not come with dock.

Macworld: The Macworld® and Macworld Expo® marks are the property of International Data Group, Inc., and Zones, Inc. is not affiliated in any way with those marks or with the Macworld® Expo.

FREE Memory Offer: Up to 512MB FREE memory with select Apple computers and professional \$40 installation purchase. 512MB memory offers require mail-in rebates. Allow up to one day for installation. Offer subject to change due to memory price volatility. Call for latest offers. Offer good while supplies last. Not valid with any other Mac Zone offers.

Order
by Phone

1-800-304-0286

Corporate bids welcome!

A NASDAQ® COMPANY Ticker Symbol: ZONS

Mention this source code
when you order and save!

Source Code
MA093

www.maczone.com

Call the Mac Experts!

REFURBISHED COMPUTERS

We just received a huge shipment of quality, refurbished Apple computers at killer prices!



iMac® G3/600 CRT, 128 MB RAM, 40 Gb HD, CD, Snow	\$639
iMac® G3/600 CRT, 256 MB RAM, 40 Gb HD, CD-RW, Graphite or Snow	\$769
iMac® G4/800 LCD, 256 MB RAM, 60 Gb HD, Combo Drive, 56K	\$1188
iMac® G4/800 LCD, 256 MB RAM, 80 Gb HD, SuperDrive, 56K	\$1269
iMac® G4/800 LCD, 256 MB RAM, 80 Gb HD, SuperDrive, 56K, 17"	\$1495
iMac® G4/1-GHz LCD, 256 MB RAM, 80 Gb HD, SuperDrive, 17"	\$1595

Since our Refurbs are so popular, our inventory changes constantly. Click or call for our latest selection!

PowerBook® G4/867, 256 RAM, 40 Gb, Combo Drive, 12.1" Screen	\$1449
PowerBook® G4/867, 256 RAM, 30 Gb, Combo, 15" Screen	\$1749
PowerBook® G4/867, 256 RAM, 40 Gb, Combo, 15" Screen	\$1888
PowerBook® G4/1-GHz, 512 RAM, 80 Gb, SuperDrive, 15" Screen	\$2299
PowerBook® G4/1-GHz, 512 RAM, 80 Gb, SuperDrive, 17" Screen	\$2948
iBook® G3/700, 128 RAM, 20 Gb, CD-ROM, 12.1" Screen	\$749
iBook® G3/700, 128MB RAM, 20 Gb HD, Combo Drive, 12.1" screen	\$999
iBook® G3/700, 256MB RAM, 30 Gb HD, Combo Drive, 14.1" screen	\$1249

Receive a free Kryptonite® security cable with every new or refurb laptop!

DISPLAYS & SCANNERS

LACIE We've Got The New Lacie Electron Blue IV CRT Monitors. Stellar Color, Clarity and Quality. 2048x1536 Maximum Resolution.

Closeout of our popular refurb Epson scanners—the highest quality scans ever for the price!

Refurb Epson 1250 1200x2400 opt. res Scanner.....\$59

Refurb Epson 1650P 1600x3200 opt. res Photo Scanner.....\$88

USED COMPUTERS

PowerCenter 604/150 32MB RAM, 256 HD, CD	\$59
7300/180 80MB RAM, 256 HD, CD	\$199
Beige DT G3/233 64MB RAM, 256 HD, CD	\$269
Beige MT G3/266 64MB RAM, 6 Gb HD, CD	\$288
Blue & White G3/400 128MB RAM, 9 Gb HD, CD	\$488
iMac G3/333 256MB RAM, 4Gb, CD	\$559
iBook G3/500 64MB RAM, 10Gb, CD	\$649
PM Tower G4/400 64MB RAM, 10Gb HD, DVD	\$897
Titanium PB G4/500 256MB RAM, 20Gb HD, DVD	\$1366

CAMERAS AND SOFTWARE

Get a **FREE** Case Logic Photo-Video Bag PLUS the best prices on new digital cameras!



Get a free Shuttle Pro with Final Cut Pro 4.0 purchase! Or Upgrade for only \$393!

Factory Refurbished Specials
Airport Extreme Card...\$79
Airport Base Station...\$169

POWER MAX

Knowledge is Power

Order Online or Call One of Our Mac Experts!

WWW.POWERMAX.COM

Daily specials & blowouts • Bargain Basement Deals • New, used & refurb lists
Digital video packages • Important National Macintosh News Updated Daily!

800-441-6977

Local: (503) 624-1827 • Fax: (503) 624-1635
email: sales@powermax.com

Prices subject to change without notice. Prices reflect cash discount. Credit card orders strictly verified against fraudulent use. With use of credit card as payment customer acknowledges that some products are subject to final sale. Many prices are limited to stock on hand. All brand or product names are registered trademarks of their respective holders.

*Trade-in values subject to change and are dependent on model and computer condition. Ask your salesperson for details. †Current G5s will ship with Mac OS X v10.2 Jaguar. Apple announced late year delivery for Panther. ††After manufacturer rebates.

Are You A Member Of A User Group?

www.applemugstore.com

PowerMax is a division of Computer Stores NW, Lake Oswego, OR.

Macintosh User Group members enjoy access to a very special Apple-sponsored web site featuring super deals on the latest Apple products and more! If you are currently not a member of an Apple User Group and would like access to the MUG Store special offers, discounts, and resources, contact an Apple User Group near you to sign up.



LOWEST PRICES EVER ON NEW MACS!

Check out these great prices on brand new Macs!

iBook G3/700 128/20/CD	\$788
iMac G3/600 128/40/CD	\$649

Get a new PowerBook for \$49/mo! Call for details.

A Huge Selection of New eMacs

eMac G4/700 256/40/CD	\$669
eMac G4/700 128/40/CD-RW	\$699
eMac G4/700 256/40/Combo	\$849
eMac G4/700 128/40/Combo/56k	\$849
eMac G4/800 256/60/SprDr/56k	\$1029

Trade Up To The New iPod™!

Thinner, Lighter and Faster Than Ever!

Get up to \$200 trade-in credit for your old iPod!

Refurbished xServes On Sale!

G4/1-GHz 256MB RAM, 60GB HD	\$1699
G4/1-GHz Dual 512MB RAM, 60GB HD	\$2399

Used Blue & White Apple Displays Now Only \$99!

Trade-In your Old Power Mac for a Super-Fast G5

There's never been a better time to upgrade your computer! Enjoy the power and speed of a new G5 and get a substantial discount off the price with the trade-in of your old G3 or G4!

FREE RIO MP3 Player & Epson C82 Printer w/ Purchase!



POWER MAC G5 1.6GHZ 256MB RAM 80GB HD Combo Drive/no modem	\$1770
POWER MAC G5 1.6 GHZ 256MB RAM 80GB HD SuperDrive/Built-in modem	\$1994
POWER MAC G5 1.8 GHZ 512MB RAM 160GB HD Combo Drive/no modem	\$2170
POWER MAC G5 1.8 GHZ 512MB RAM 160GB HD SuperDrive/Built-in modem	\$2394
POWER MAC G5 DUAL 2.0 GHZ 512MB RAM 160GB HD SuperDrive/Built-in modem	\$2994

WE TAKE TRADE-INS!

Looking to trade-in your old Mac? We'll take your Mac OS computer in trade toward the purchase of new product. Call one of our expert Mac consultants for full details.

Custom Macs, Built To Order!

We can upgrade your new Mac with extra hard and optical drives, more RAM, powerful video cards and more. Call our experts and find out how!

Friends and Family Video Chat Special!

- The future is here!
 - Free long distance video chats!
 - It really, really works!
- This special bundle includes:
- Two new G3/600 iMacs
 - Two new HP DeskJet 5550 Printers
 - Two new iSight video conferencing units



Only \$1595* for all!

STORAGE SOLUTIONS

LACIE 160GB FireWire HD	\$239
Lacie D2 line; Larger & Faster Than Ever! Drives Now Available in FireWire 800!	
200GB 7200 RPM FireWire	\$319
D2 Hard Drive	\$369
400GB 7200 RPM FireWire 800	\$699
Big Disk Hard Drive	\$699
DVD-RW D2 FireWire w/ Mac Authoring Software	\$299

We Carry a Huge Selection Of Hard Drives, CD-Burners and Removable Media from All Major Manufacturers!

Broadway Photo

2922 Ave. L, Brooklyn, NY 11210

Customer Service: 718-338-3028
Local & International: 718-338-1800
24 Hour Fax Hotline: 718-338-3029
Email: info@bwayphoto.com

1-800-951-9632

Store Hours: Mon-Thurs: 9am-10pm • Friday: 9am-6pm • Sunday: 10am-7pm

Visit our website at: www.bwayphoto.com

We specialize
in Overnight Delivery.
Place Your Order by 7:00 PM EST
and Receive Your Order by
the Next Business Day!
For an Additional
\$29.95



- 21 Day Satisfaction
- Next Day Air Available
- Worldwide Shipping
- No Surcharge on Credit Cards
- Government & School PO's Accepted

DIGITAL CAMERAS

NIKON Coolpix 4300

- 4.0 MegaPixels
- 3x Opt. Zoom/Digital Zoom
- USB

\$319⁹⁹

NEW! Coolpix 2100 \$209.99

NEW! Coolpix 3100 \$279.99

NIKON Coolpix 5700

- 5.24 MegaPixels CCD
- 4x Optical Zoom
- 2/3" CCD

\$769⁹⁹

Coolpix 4500 \$449.99

NIKON Coolpix S0

- 3.11 MegaPixels
- 3x Opt.

\$389⁹⁹

Coolpix 3500 \$259.99

OLYMPUS C-5050

- 3.34 Million Pixels
- 10x Digital Zoom
- 5x Optical Zoom

\$539⁹⁹

SONY DSC-F717

- 5.24 MegaPixels
- 2x Digital Zoom
- 5x Optical Zoom

\$609⁹⁹

NEW! DSC-F77 \$349.99

SONY DSC-V1

- 5.0 MegaPixels
- 4x Digital Zoom
- 4x Optical Zoom

\$559⁹⁹

DSC-V30/50 CALL

CANON PowerShot G5

- 4.0 MegaPixels
- 4x Optical Zoom
- 1.8" LCD Screen

\$639⁹⁹

G2 \$404.99

G3 \$469.99

NEW! A60 \$209.99

FUJIFINEPIX S602

- 6.0 MegaPixels
- 6x Optical Zoom
- 1.8" LCD

\$489⁹⁹

NEW! F601 \$369.99

Finepix 3800 \$299.99

FUJIFINEPIX F700

- 6.2 MegaPixels
- 3x Optical Zoom
- 1.8" LCD

\$509⁹⁹

PENTAX Optio 550

- 5.0 MegaPixel CCD
- 4x Dig/5x Opt. Zoom
- 1.5" LCD

\$449⁹⁹

Optio 450 \$399.99

Optio S \$319.99

NIKON D100

- 6.1 MegaPixels
- 1.8" LCD Screen
- USB

\$1409⁹⁹

OLYMPUS C-4000

- 4.1 MegaPixels CCD
- 3x Digital Zoom
- 3x Optical Zoom

\$339⁹⁹

NEW! D-390 \$149.99

NEW! D-560 \$229.99

OLYMPUS C750

- 5.0 MegaPixels
- 10x Optical Zoom
- 4x Digital Zoom

\$469⁹⁹

C-740 \$369.99

E-1 CALL

SONY Mavica CD-500

- 4.0 MegaPixels
- 2.5" LCD Screen
- 1/1.8" CCD

\$549⁹⁹

NEW! CD350 \$389.99

CANON EOD 10D

- 6.30 Megapixel CCD
- 10x Optical Zoom
- CMOS Sensor

\$1219⁹⁹

CANON PowerShot S50

- 5.0 MegaPixels
- 3x Optical Zoom
- 4.1x Digital Zoom

\$449⁹⁹

S330 \$279.99

NEW! A70 \$249.99

NEW! A70 \$179.99

FUJIFINEPIX S2

- 3024x2016 Resolution
- USB

\$1409⁹⁹

NEW! Finepix A303 \$235.99

NEW! Finepix F410 \$299.99

MINOLTA Dimage XT

- 3.2 MegaPixels
- 3x Optical Zoom
- 4x Digital Zoom

\$299⁹⁹

Dimage X1 \$339.99

NEW! Dimage F300 \$369.99

NEW! Dimage E223 \$169.99

NIKON Coolpix 5400

- 5.1 MegaPixels
- 4x Digital Zoom

\$619⁹⁹

Coolpix 5000 \$669.99

NIKON D1X

- 5.47 MegaPixels
- SLR Type Dig. Camera
- Uses Nikon AF-D/I/IS Lenses

\$3099⁹⁹

OLYMPUS C-50

- 5.0 MegaPixels
- 3x Optical Zoom
- 4x Digital Zoom

\$429⁹⁹

NEW! Stylus 400 Digital \$399.99

NEW! Stylus 300 Digital \$299.99

OLYMPUS E-20

- 5.24 MegaPixels
- 2/3" CCD Screen
- USB

\$1029⁹⁹

E-10 \$729.99

SONY DSC-P10

- 5.0 MegaPixels
- 3x optical Zoom

\$409⁹⁹

DSC-P8 \$369.99

DSC-P32 \$209.99

DSC-P52 \$249.99

DSC-P72 \$279.99

DSC-P82 \$374.99

CANON EOS 10S

- 11 MegaPixels
- 2.0" LCD Screen
- IEEE 1394

\$6449⁹⁹

Special! 1D \$2949.99

CANON PowerShot S45

- 4.1 MegaPixels
- 3x Optical Zoom
- 3.6x Digital Zoom

\$399⁹⁹

S330 \$279.99

NEW! S400 \$289.99

NEW! S400 \$399.99

MINOLTA Dimage 7H

- 5.24 MegaPixels
- 7x Optical Zoom
- 1.8" LCD

\$819⁹⁹

NEW! Dimage S414 \$299.99

71 \$669.99

SIGMA SD-9

- 1.8" LCD Screen
- IEEE 1394
- USB

\$999⁹⁹

DIGITAL VIDEO

CANON GL-2

- IEEE 1394
- 20x Optical Zoom
- 100x Digital Zoom
- 2.5" LCD Screen

\$1809⁹⁹

CANON OPTURA 200MC

- 2.5" LCD Screen
- IEEE 1394
- 10x Optical Zoom
- 200x Digital Zoom

\$849⁹⁹

Optura 10 \$559.99

Optura 20 \$629.99

ES8600 \$259.99

JVC GY-DV300

- 14x Optical Zoom
- 1/3" CCD
- 440,000 MegaPixels

\$2009⁹⁹

JVC GR-DV800

- 1.33 MegaPixels
- 10x Opt. Zoom
- 2.5" Color LCD
- USB

\$579⁹⁹

GR-DV3000 \$789.99

NEW! GR-DV4000 CALL

GR-D30 \$329.99

GR-D70 \$399.99

Special! GR-D90 \$449.99

GR-DX75 \$509.99

Special! GR-DX35 \$569.99

NEW! GR-DX300 \$749.99

GR-DV500 \$509.99

NEW! GR-HD1 \$2309.99

SONY DCR-VX2000

- 3-CCD Progressive Scan
- 12x Opt/48x Dig. Zoom
- 2.5" LCD Screen

\$1949⁹⁹

GVD1000 \$929.99

GVD800 \$649.99

NEW! DCR-DVD100 CALL

NEW! DCR-DVD200 CALL

NEW! DCR-DVD300 CALL

SONY DCR-PC120BT

- Mini DV Format
- Smallest DV Camera
- 2.5" LCD Screen
- BLUETOOTH

\$1059⁹⁹

NEW! DCR-PC105 \$739.99

CANON OPTURA 200MC

- 2.5" LCD Screen
- IEEE 1394
- 10x Optical Zoom
- 200x Digital Zoom

\$849⁹⁹

Optura 10 \$559.99

Optura 20 \$629.99

ES8600 \$259.99

JVC GR-DV800

- 1.33 MegaPixels
- 10x Opt. Zoom
- 2.5" Color LCD
- USB

\$579⁹⁹

GR-DV3000 \$789.99

NEW! GR-DV4000 CALL

GR-D30 \$329.99

GR-D70 \$399.99

Special! GR-D90 \$449.99

GR-DX75 \$509.99

Special! GR-DX35 \$569.99

NEW! GR-DX300 \$749.99

GR-DV500 \$509.99

NEW! GR-HD1 \$2309.99

SONY DSR-PD150

- 2.5" Swivel Screen
- 12x Opt/48x Dig Zoom
- 3-CCD Imaging
- Still Photo

\$2479⁹⁹

Special! DSR-PDX10 \$1609.99

PANASONIC PV-DV953

- USB
- 3.5" LCD Screen
- 700x Digital Zoom
- 10x Optical Zoom

\$1009⁹⁹

PV-GS50S \$569.99

NEW! PV-GS70S \$699.99

PV-DV53 \$329.99

Special! PV-DV73 \$599.99

PV-DV103 \$469.99

PV-DV203 \$499.99

PANASONIC AG-DVX100

- 3-CCD Imaging
- Super VHS
- 12x Optical Zoom
- IEEE-1394

\$2609⁹⁹

NEW! AG-DV800 \$2349.99

NEW! AG-DV7 \$869.99

AG-DV1000 \$829.99

NEW! AG-DV2500 \$1379.99

AG-DVC20 \$3499.99

NEW! AG-EZ50 \$1099.99

NEW! PV-VDRM30 \$879.99

Special! PV-VM202 \$909.99

SCANNERS

CANON FS4000

- 5880 x 4000 pixels
- 4000 DPI Optical Resolution
- USB

\$619⁹⁹

NIKON LS40

- 2670 Pixel Mono-chrome Linear CCD
- 2900 DPI Optical Resolution

\$519⁹⁹

Insanely Great Deals on Memory, Macs, Drives & More!

Lifetime Warranty RAM

65 RAM CALL!

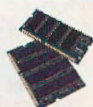
**512mb
ONLY
\$62**

For the following CPU configurations:
G4 Dual 1GHz/1.42GHz (DDR PC 2700)
G4 iMac® (PC-133 168 pin CL3)
G4 AGP 466-Dual 1GHz (PC-133 168 pin CL3)
G3/G4/iMac® 350-600 (PC-133 168 pin CL3)

1gb ^{KIT} only \$120

PowerBook G4 RAM - SODIMMs

Model	RAM Type/Description	256mb	512mb
PowerBook® G4 12"	DDR PC 2100 SODIMM	\$36	\$79
PowerBook® G4 17"	DDR PC 2700 SODIMM	\$36	\$79



Power Mac® G5

**All New
Incredibly fast!**



The world's fastest personal computer.

1.6GHz 256/80/SuperDrive **\$WOW**

1.8GHz 512/160/SuperDrive **\$SAVE**

Dual 2GHz 512/160/SuperDrive **\$BIG**

DISCONTINUED DEAL!

G4 1.25GHz 256/80/Combo **\$1,294**

**Trade Up Your Old G4
Call 1-800-80-WE-BUY for a quote!**

Apple® Specials!

17" Powerbook® G4



1 GHz G4
512mb/60gb
SuperDrive
\$3,294

iPod
10/15/30gb
In Stock!
FREE Shipping

Final Cut Pro® 4.0 In Stock! \$994

with **FREE** Contour ShuttlePro

Final Cut Pro® 4.0 Upgrade \$394

with **FREE** Griffin PowerMate

Final Cut Express In Stock! \$294

with **FREE** Griffin PowerMate

Have You Got The Drive to Succeed?



**External
FireWire 800 Drives**
with Oxford 922 Chipset

120gb	7200rpm	2mb Buffer	\$ 259
120gb	7200rpm	8mb Buffer	269
200gb	7200rpm	2mb Buffer	339
200gb	7200rpm	8mb Buffer	355
250gb	7200rpm	8mb Buffer	485

Feel the Need for Speed? FireWire 800 delivers!



External FireWire 400 Drives
with Oxford 911 Chipset

120gb	7200rpm	2mb buffer	\$ 164
120gb	7200rpm	8mb buffer	184
200gb	7200rpm	2mb buffer	255
200gb	7200rpm	8mb Buffer	269
250gb	7200rpm	8mb Buffer	379

Internal ATA-100 Hard Drives

120gb	7200rpm	2mb buffer	\$109
120gb	7200rpm	8mb buffer	119
200gb	7200rpm	2mb buffer	199
200gb	7200rpm	8mb buffer	219
250gb	7200rpm	8mb buffer	339

2.5" Notebook Drives

2.5" 20GB Toshiba 4200 rpm	\$ 89
2.5" 80GB IBM Travelstar 4200 rpm	269
2.5" 60GB IBM Hitachi 7200 rpm	339

External Drive Cases

3.5" FireWire 400 w/ Oxford 911	\$ 55
3.5" FireWire 800/USB2.0 w/ Oxford 922	179

Software & Specials!

AppleCare® for iBook®	\$ 192	
AppleCare® for Power Mac® + Display	192	
AppleCare® for PowerBook® + Display	262	
AppleCare® for iMac®/eMac®	132	
Contour ShuttlePro	87	
Contour Space ShuttlePro	39	
DVD-R 10-pak 4.7gb (single sided)	15	
Griffin PowerMate	38	
64mb JetFlash USB Flash Drive	25	
128mb JetFlash USB Flash Drive	39	
256mb JetFlash USB Flash Drive	69	
512mb JetFlash USB Flash Drive	125	

Wow!!

Long term peace of mind.



Made for ideas.

120GB 7200 rpm FireWire d2 case	\$ 209
200GB 7200 rpm FireWire 800 d2 case	409
250GB 7200 rpm FireWire 800 d2 case	475
400GB 7200 rpm Big Disk FireWire 800 DV	749
500GB 7200 rpm Big Disk FireWire 800 DV	929
4x24x12 DVD-RW FireWire d2 case w/software	319
52x24x52 CD-RW FireWire d2 case	135

Pioneer DVD Writer

DVR-A05 (4x Internal) **\$179!**



Epson/ATI/Atto/Wacom/Aurora/NetGear/Sonnet/Dr. Bott/NEC/Kensington...

Insanely Great since 1994



**MAC
Solutions**



Authorized Reseller



Apple Specialist



Authorized Service Provider

Secure Online Ordering at **www.macsolutions.com**

800-873-3726

Check our website
macsolutions.com
for the freshest deals!

MacSolutions, Inc. 11933 Wilshire Boulevard, West Los Angeles, CA 90025 Fax: (310) 966-4433

University & School P.O.'s Welcome Note: All prices are subject to change. Limited to stock on hand. *707

*Web prices listed. Call or check website for details on new computer purchases. Not responsible for typographic errors. Not valid in combination with any other offers or promotions.

All Apple products are only available for sale in-store or to previous MacSolutions customers due to our agreement with Apple Computer, Inc.

sales@macofalltrades.com

MAC OF ALL TRADES .COM

BUY or SELL

ONLINE

800.304.4639

USED MACS

MAC-PRO

SYSTEMS & SOFTWARE

www.mac-pro.com

VISIT OUR WEBSITE FOR

BACK TO SCHOOL iBook SPECIALS!

GREAT DEALS ON ALL MAC MODELS

POWERBOOKS iMACS EMACS TOWERS

Sign up for Our Mailing List Today!

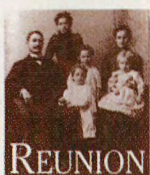
Any Ad is a Mac-Pro Ad!

800-525-3888

FAMILY HISTORY - GENEALOGY

REUNION® 8

Reunion 8 is the perfect tool to organize your family history. Plenty of room for names, dates, places, stories, notes, tidbits, and sources. Include all your favorite pictures, sounds, and home movies. Automatically build multimedia web pages to share your family history on the Internet! Print large, colorful tree charts, timeline charts, and fan charts for family reunions. Fun and educational for the whole family. Reunion 8 takes advantage of OS X and includes over 100 new features and enhancements!



Leister Productions

web site/demo: www.LeisterPro.com

e-mail: info@LeisterPro.com

To order, call...

MacConnection 800-800-2222

MacAddict.com

GET WHAT YOU NEED

One List To Organize Them All

lakewoodstudios.com

MonitorFrame

for iMac®

Come see our complete line of stunning custom made 15" & 17" iMac frames, designed to enhance any decor.

monitorframes.com

800-386-3004

iMac is a registered trademark Apple Computer, Inc.

A Work of Art Is Not Complete Without a Frame

MonitorFrame

for iMac®

Come see our complete line of stunning custom made 15" & 17" iMac frames, designed to enhance any decor.

monitorframes.com

800-386-3004

ACME

MADE

MANUFACTURING

SAN FRANCISCO

EST. 2003 USA

Designed Protection. Acme Made.

www.acmemade.com

STUDENTS & TEACHERS

Unbelievable Software Savings!

ADOBE

Design, Web, Publishing & DV Collections.....65% off!

Acrobat 6.....Call!

Photoshop 7.....Call!

MICROSOFT

Office for OS 9 or X.....Call!

MACROMEDIA

Studio MX 1.1.....\$174.95 *

Flash MX.....\$94.95

Director MX.....\$443.95 *

Authorware 7.....\$454.95 *

AND MORE

Finale 2003.....\$193.95 *

EndNote 6 & 7.....\$94.95

Painter 8.....\$93.95

LightWave 3D.....\$379.95 *

Boris Red.....\$579.95 *

Vegas 4.....\$148.95

*Price after \$15 mail-in rebate.

FREE SHIPPING

for online orders!

We'll beat any price in this magazine. GUARANTEED!

<http://MACADDICT.SPRYSOFT.COM>

1-800-840-6786x201

Sprysoft

Turn your Mac into a huge collection of guitar amps!



Metal



Jazz



Country



Funky

Play guitar anywhere, anytime, any style with your Mac

AmpliTube *live*

- Award-winning sound acclaimed worldwide as the best tube amp-emulation ever made
- Combine a Clean, Crunch, Lead Amplifiers with 3 physically emulated cabinets
- Add Delay, Wah and Overdrive Stomps
- Play in perfect tune with the built-in chromatic tuner
- 128 presets, 64 users can be switched using MIDI foot control
- An unbelievable huge amp set, ready to play anytime
- Play along with your favorite tunes with iTunes



AmpliTube Live \$129

www.amplitube.com

Call 954-749-3016, ikus@ikmultimedia.com



I D E A S T U R N M U S I C O N

Don't let him touch the computer!
These pop up windows are driving me crazy!!!!
I can't login to the web site!
What was that password again?
I can't find that file!
Why do these windows keep coming up?
These pop up windows are driving me crazy!!!
I can't find that file!

LIFE IS HARD

HELP IS HERE

AutoID Pop-Up Zapper BabySafe

Batista.org

ESellate Orders Receive 10% Discount
Use CouponID CPN996434158

Macintosh
Web Hosting & Co-Location

Special website hosting offers for MacAddict Readers!

SATISFACTION GUARANTEED!

www.inno-tech.com/MacAddict
877-858-7722

InnoTech
INTERNET PRESENCE SPECIALISTS

Exclusive hosting provider for **MacAddict**

We Can Beat All Prices on Memory then CALL US!!

Call Around

iMAC 333Mhz
160MB RAM/4 GB HD/24X CD-ROM/E-NET/56K MODEM

\$429⁹⁹

1-800-673-6227

SEE OUR NEW HYPERSPEED MEMORY BY 1-800-4-MEMORY

FREE T-Shirt with \$100 HyperSpeed Memory purchase

www.18004MEMORY.COM

1-800-4-MEMORY
1-800-463-6679

Only \$8²⁵ per Month*

Great Hosting. No Bull.

FatCow

The Plan **\$99 a year**

- 100MB disk space
- 100 email accounts
- 5GB monthly trans.
- Shopping Cart
- CGI, PHP, MySQL

Grow Your Own **\$99 a year**

- Start with our \$99.00 FatCow plan and
- Add all the disk space and bandwidth you need.

Mini Moo **\$5 a year**

- Domain name parking
- 1 email account
- Coming soon page
- \$20 domain names

FatCow: The Smart Choice in Small Business Hosting.

www.fatcow.com/addict
Toll Free 1-800-925-2184

Become a reseller
call 1-866-544-9343 x 5008

*Based upon one year \$99.00 annual fee, due at sign-up.

RAMJET

MAC MEMORY FLASH MEMORY FIREWIRE HARD DRIVES

Secure Online Ordering at:
www.ramjet.com

- Same Day Shipping
- Lifetime Warranty
- Educational PO's Accepted

or by calling:
1-800-831-4569

Lifetime RAMJET Warranty

Save Money on Top Quality RAM

The ThinkDifferent Store

For all your iPod and iBook gear.



Action Jacket
\$29.99



MacClear for 3G iPod
\$10.00

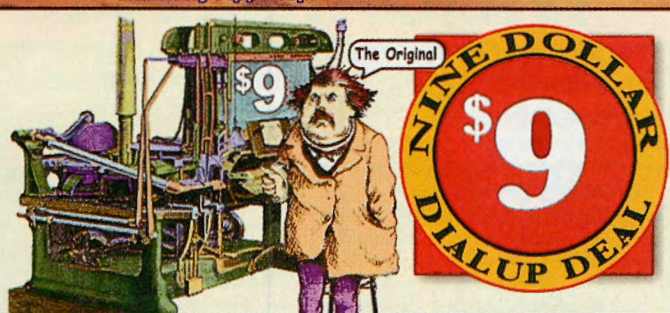


iSkin eXo
\$28.99

www.iSkinStore.com

TheMACisp

Apple - Macintosh
Formerly Appleisp



Visit: themacisp.net/ma or call Toll Free: 1.800.307.0663



Ultra cool protection for your iPod.

iSkin™ iPod Protector

Available in 25 skin tones including:
Frosted, Vibrant, Solids and Glow-in-the-dark.

iSkin iBook / PowerBook G4 (15") Keyboard Protector.



Molded to fit over each key

Removable and washable

Protects while you type

NEW iSkin™ ProTouch

Protects your Apple® Pro Keyboard
against spills and dirt while you type!
Ideal for the iMac®, eMac® and Power Macintosh® Pro Keyboards.
(Available in translucent frosted skin tones.)

for product info and where to buy, visit us online.

www.iSkinProtect.com

www.macwireless.com

**iMacs & all older Macs
can now be wireless!**

PC Card, PCI, USB,
POE, antennas, outdoor,
camera, bluetooth, ...

Extend the range of your Ti-Book

510.848.7126

If it's wireless,
find it at

MacWireless.com



memory.com

RAM Memory
DDR Memory
USB Portable Flash Drive
Secure Digital Card
Memory Stick Card
xD Card
Multi Media Card
Smart Media Card
Card Readers/Adaptors
VGA Card
Portable HDD
USB Hub

866-563-6679

Stand Out In A Crowd



www.macskinz.com

www.MEGA.MACS.COM 918-664-MACS
fax (6227)
918-663-6340

BUNDLE SPECIAL Buy Both for only \$299!

FrameMaker 7.0™ \$449	Macromedia Flash MX Bundle only \$299	Microsoft Office X \$299	Systemworks 3.0 \$177	Camera Studio 2™ \$219	Omni Page Pro X™ \$189
--------------------------	------------------------------------------	-----------------------------	--------------------------	---------------------------	---------------------------

MP3 PLAYER SPECIALS

Macromedia Studio MX™ \$39	Mac OS X 1.1 \$89	Mac OS X 1.2 \$79	Mac OS X 1.3 \$59
-------------------------------	----------------------	----------------------	----------------------

CD-ROM Drives

4x HP - Plextor \$7	4x/24x Apple Int. \$9/99
------------------------	-----------------------------

IDE

32x Apple \$19	24x Apple Slimline iMac \$39	6x Apple iMac DVD \$37	Apple 16x/10x/4x Combo \$69	Apple SuperDrive DWR104 \$169
-------------------	---------------------------------	---------------------------	--------------------------------	----------------------------------

DIGITAL CAMERAS

USB Kensington \$19	USB Logitech \$24	FireWire Fire-i \$99
------------------------	----------------------	-------------------------

Jump Start Educational Software Packs

30ds each choose from: Preschool, Kindergarten, 1st or 2nd grade \$18

Norton/Symantec Bargains

Utilities 4.0/6.0 Antivirus 6.0/7.0 \$7/14 9/14	Internet Security 1.0 or System Works 1.0 \$14
----------------------------------------------------	---------------------------------------------------

MacroMedia

Dreamweaver MX \$279	Fireworks MX / Flash MX \$239/249	Freehand 10 / Flash 4 \$149/59
-------------------------	--------------------------------------	-----------------------------------

Other Software Bargains

Adobe After Effects 5.5 mac/win \$899	Business Plan Toolkit v7 \$29	Encyclopedia Britannica Ref Ref 2003 \$14	Web Savant/Timbuktu 2000 set \$39/29	Office upgrades 98-2001/X- \$69/249/199
------------------------------------------	----------------------------------	----------------------------------------------	-----------------------------------------	--------------------------------------------

PCI Cards

USB 2port \$9	FireWire 4port- \$17	SMC 10/100 \$14	Asante 10/100/ \$11
---------------	----------------------	-----------------	---------------------

Misc. Hardware

USB floppy drive \$37	Omni PCI SCSI Card \$19	iFunPad/iFunStick \$77	USB Lights \$7
--------------------------	----------------------------	---------------------------	-------------------

Pro Speakers

Optical 2 button USB \$14	Mouseworks \$5	2 Pack \$10
---------------------------	----------------	-------------

Keyboards & Mice

Logitech Cordless Duo \$24	Kensington \$14	Logitech \$19
-------------------------------	--------------------	------------------

Preowned System Specials

Beige or G3/500/128mb/4x24x/CD/USB \$299!	Beige or G4/1GHz/768mb/4x24x/CD/USB/FW \$399!	Beige or G3/500/128mb/4x24x/CD/USB/FW \$399!
----------------------------------------------	--------------------------------------------------	-------------------------------------------------

Mac OS

7.6 \$49	8.1 \$59	8.5 \$59	9.0 \$59	X.1- \$59
----------	----------	----------	----------	-----------

FREE SHIPPING

On all M-Audio products**

WE BUY MACS!

We stock many parts!

Check out our online clearance deals!

Pre-order your new
Power Mac G5!
Call us for
special pricing.

Office[®] **mac**
\$ 199



eMAC G4700/128R/40G/COMBO/56K \$ 899.00*
eMAC G4800/256R/60G/SUPER/56K \$ 1099.00*

*Brand new and includes AppleCare 3 yr. warranty



iMAC G4700/128R/40G/CDRW/56K \$ 1199.00*
iMAC G4700/256R/40G/COMBO/56K/SPK \$ 1299.00*
iMAC G4800/256R/60G/SUPER/56K/SPK \$ 1499.00*

*Brand new and includes AppleCare 3 yr. warranty



iBOOK 12.1/G3700/128R/20G/CD-ROM/56K \$ 899.00*
iBOOK 12.1/G3800/128R/30G/COMBO/56K \$ 1149.00*
iBOOK 14.1/G3800/256R/30G/COMBO/56K \$ 1299.00*

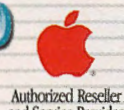
*Brand new and includes AppleCare 3 yr. warranty



714-630-8200

Your One-Stop Apple Shop

www.lacomputercompany.com
2993 E. WHITE STAR AVE • ANAHEIM, CA 92806



Authorized Reseller
and Service Provider

Cash discounted prices and while supplies last. MC/Visa/AX accepted. Prices subject to change without notice. Not responsible for typographic, photo or technical errors. 2003 Apple Computer, Inc. all rights reserved. Apple, the Apple logo, Mac, the Mac logo and Macintosh, Power Mac, iMac, iBook, eMac and AppleCare are trademarks of Apple Computer, Inc., registered in the U.S. and other countries.

GET ORGANIZED!

The most popular digital asset management tool for creative professionals. Manage & publish your text images, presentations, videos, MP3s, layouts and more with Canto Cumulus 5.5.



www.canto.com

Cumulus

MacAddict

You Can Also Order By Mail
By Writing To Us At :

MacAddict Customer Service
Future Network USA
150 North Hill Dr.
Brisbane, CA 94005

PLEASE SEND CHECK OR
MONEY ORDER AND SPECIFY
WHICH ISSUE YOU WOULD LIKE TO ORDER.

Inside the U.S. please send: \$9.95 for magazine and CD-ROM; \$7.95 for magazine only.
Outside the U.S. please send: \$12 for magazine and CD-ROM; \$10 for magazine only.
U.S. prepaid funds only.

You Can Order Back
Issues By Calling

1-800-865-7240

Mon-Fri, 7am-11pm CST

Please have your credit card ready.

Back issues are available

on a limited basis.

Best
Prices On

Memory

for all
Apple CPUs

Lifetime Warranty RAM

512mb
ONLY \$ **62**

For the following CPU configurations:

G4 Dual 1GHz/1.42GHz (DDR PC 2700)
G4 iMac (PC-133 168 pin CL3)
G4 AGP 466-Dual 1GHz (PC-133 168 pin CL3)
G3/G4/iMac 350-600 (PC-133 168 pin CL3)

1gb
only
\$120



PowerBook G4 RAM - SODIMMs

Model	RAM Type/Description	256mb	512mb
PowerBook® G4 12"	DDR PC 2100 SODIMM	\$36	\$79
PowerBook® G4 17"	DDR PC 2700 SODIMM	\$36	\$79



Hard Drive Fire Sale!

	120gb	7200rpm	2mb buffer	\$ 164
External	120gb	7200rpm	8mb buffer	184
FireWire 400	200gb	7200rpm	2mb buffer	255
w/ Oxford 911	200gb	7200rpm	8mb buffer	269
	250gb	7200rpm	8mb buffer	379



www.macsolutions.com



MacSolutions, Inc.
11933 Wilshire Boulevard
West Los Angeles, CA 90025
Phone: (310) 914-3200
Fax: (310) 966-4433
University & School P.O.'s Welcome

Note: Prices subject to change without notice. Ad code 707

Authorized Reseller Apple Specialist

65 RAM
In Stock.
CALL!

800-873-3726

www.macsolutions.com

ink & toner

- \$3.85 shipping! • \$2 off: enter promo code "MA11"
- All brands: Alps, Lexmark, HP, GCC, Brother, more!

Epson Paper	Epson Cartridges	more Epson...
S041134 glossy, 20pk 6.46	T007201 Orig. Epson 20.95	T018201 Orig. Epson 19.95
S041124 glossy, 20pk 13.23	Inkfarm brand 16.75	Inkfarm brand 16.05
S041141 glossy, 20pk 9.08	T009201 Orig. Epson 26.36	T019201 Orig. Epson 26.36
S041156 glossy, 20pk 25.74	Inkfarm brand 16.99	Inkfarm brand 14.75
S041257 matte, 50pk 10.98	T008201 Orig. Epson 17.51	T020201 Orig. Epson 22.27
S041140 glossy, 20pk 9.08	Inkfarm brand 13.99	Inkfarm brand 13.65
S041286 8.5x11, 20pk 13.66	T026201 Orig. Epson 25.95	T003011 Orig. Epson 28.35
S041290 11x17, 20pk 39.67	Inkfarm brand 16.88	Inkfarm brand 15.74
S041341 8.5x11, matte 16.61	T027201 Orig. Epson 21.51	T005011 Orig. Epson 34.29
S041331 8.5x11, semi 13.66	Inkfarm brand 16.88	Inkfarm brand 18.74
Too much to list...call or visit site.	T028201 Orig. Epson 27.52	C80 black Orig. Epson 29.83
HP Cartridges	Inkfarm brand 19.75	Inkfarm brand 18.75
51645A new 25.61	T029201 Orig. Epson 27.02	C80 c/y/m Orig. Epson 11.02
refilled 17.41	Inkfarm brand 19.75	Inkfarm brand 7.88
C6578A new 52.91	T017201 Orig. Epson 23.99	S020187 Orig. Epson 21.55
refilled 27.91	Inkfarm brand 14.95	Inkfarm brand 10.75
Too much to list...call or visit site.		Continued...

Canon Cartridges
SPECIAL: 4 Pack: 1x BCI-3C,
1x BCI-3Y, 1x BCI-3M,
1x BCI-3bk, orig Canon,
See site for details 24.91

Apple Cartridges
M8041G/C 22.76
A2M007 4.79
M3330G/A 6.22
M3328G/A 44.56
M240G/A 29.25

Too much to list...call or visit site.



1-800-INKFARM

inkfarm.com
the ink & toner supersite.™

The Missing Sync™

Mac OS Support
for Sony CLIE

► **HotSync®**

HotSync to Mac OS X/9

► **Memory Stick™**

Desktop Mounting on Mac OS X/9

► **iTunes™**

Use Your CLIE as an iTunes source

► **iPhoto™**

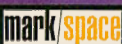
Import / Export Images to your CLIE

► **Now Shipping!**

- Missing Sync for Palm OS!
- Missing Sync for Samsung i330!

The Missing Sync for Pocket PC!

Check it out at www.markspace.com/pocketpc.html



www.markspace.com



markspace and Missing Sync are trademarks of Markspace, Inc. All other product names are trademarks or registered trademarks of their respective holders. Copyright © 2003. All Rights Reserved. Markspace.

LIND

"Your Essential Source"

Power Accessories *for*
Mobile Computing

**Auto/Air Power Adapters
for all
Titanium G4s & iBook models**

**Replacement Mini
AC Adapters
for all
Titanium G4s & iBook models
(65 Watts max.)**



Mini AC adapters feature:
• 100 - 240 auto switching input
• Fold away outlet prongs
• Convenient cable wrap
with Velcro™ Strap
• 4.1 x 1.6 x 1.1"



Lind adapters feature:
• Fault protection circuitry
with Automatic reset
• Durable ABS housing
• Nylon carrying case

**LiIon Auxiliary Power Packs
For all Ti G4s & iBooks**

Extend your laptop runtime
3 to 4 times longer
Lightweight
2.4(MP60)lbs - 3.4(MP90)lbs
Size - 11.25 x 8.5 x .5"



**MaxPower 60(95WH)
& MaxPower 90(140WH)**

Order online at:
www.lindelectronics.com
or call #800-897-8994 to order

Lind Electronics, Inc. 6414 Cambridge Street, Minneapolis, MN 55426 #952-927-6303

ACADEMIC DISCOUNTS

save Up To 80%
on Name Brand Software



FULL-VERSION ACADEMIC PRICES:

Adobe®	
Acrobat 6 Professional.....	Save 78%
Design Collection.....	Save 69%
Illustrator 10.....	Save 78%
Corel®	
DRAW Graphics Suite 11	\$139
Painter 8.....	\$95
Final Draft®	
Final Draft 6	\$129
Final Draft AV 2.....	\$129
Macromedia®	
Contribute	\$75
Dreamweaver MX	\$95
Flash MX.....	\$95
Studio MX.....	\$189
Microsoft®	
Office X.....	Save 60%
ALL MAJOR MANUFACTURERS... ALL AT HUGE DISCOUNTS!	

Adobe®
PHOTOSHOP 7 **Call!**
You Save! 54%

Coda Music®
FINALE 2003 **\$209**
You Save! 65%

Maxon®
CINEMA 4D XL 8 **\$289**
You Save! 51%

Order Online and Receive a
Discount on Shipping!

MA.AcademicSuperstore.com



CALL US TODAY!
1-800-294-4035

**ACADEMIC
SUPERSTORE**

**MARATHON
COMPUTER**

www.marathoncomputer.com
info@marathoncomputer.com

800-832-6326
615-367-6467

**Mounting Solutions
for Mac**



DeskMount



WallMount



MacSkate

LETTERS

SLIPPERY WHEN WET

I like your reference to Chinua Achebe's book *Things Fall Apart* (*Shut Down*, Jul/03, p96), which "scientifically" explains why you shouldn't read *MacAddict* in hot, steamy places. Great book—just don't try reading it in a sauna.—*Eric Antanitus*

"Proverbs are the palm-oil with which words are eaten," Achebe writes. However, I can only assume that palm-oil would increase the deterioration rate of the book in the sauna or elsewhere.—*Max*



We Leica this camera.

WHO WAS THAT MASKED MINOX?

In the article "The Incredible Shrinking Camera" (*Get Info*, Jun/03, p12), what was the name of the tiny camera shown in some lucky person's hand. I got all funny inside when I saw it.—*Troy P. Griffin*

That beauty was the Minox DCC Leica M3 2.1 (\$389, www.leica-camera.com/usa).—*Max*

MACADDICT'S NEW GLOW

What's with the glossy cover on the July 2000 issue? Yuck! At least the content is still top-notch.—*Danny Reed*

When ink is printed on a glossy cover, colors are richer and higher-contrast than when printed on a matte cover. Plus, blacks are, well, black. We want our covers to be so attractive that you'll want to whisk them off the newsstand and give them a great big hug.—*Max*

HINT: FEED THE BEAR

Here's help for Erica, who had trouble with the ferocious bear in the command-line text adventure game *Dunnet* (*Log Out*, Jul/03, p94): Drop the food you found earlier on the road! The bear will take it and run away.—*Jeff*

RUN FOR THE BORDER

You erred in your review of Canon's i950 photo printer (*Reviews*, Jul/03, p46), which you said lacked borderless printing. In fact, you can print borderlessly if you go to the Page



Setup dialog, choose the paper size, and select the borderless option.—*Hank Satterthwaite*

UNIX

I'm a Mac-crazy 14-year-old, and I want to start getting into Unix. What do you suggest for learning about Unix programming?—*Daniel Bean*



Learn Unix here.

Here's some recommended reading: *Learning Unix for Mac OS X* by Dave Taylor and Jerry Peck (O'Reilly, www.oreilly.com, \$19.95)

and—our fave here at *MacAddict*—*Unix Power Tools* by Shelly Powers et al (O'Reilly, www.oreilly.com, \$69.95).—*Max*

SAFARI'S HIDDEN DEBUG MENU

In "Mac OS X Browser Brawl" (*Get Info*, Jun/03, p15), you said Safari cannot emulate other browsers to get into sites unsupported by Safari. This is not quite true: You can set Safari to pose as another browser such as Netscape, Mozilla, Mac Internet Explorer, or Windows Internet Explorer using the User Agent fly-out menu in the Debug Menu.

—*Kris Browne*

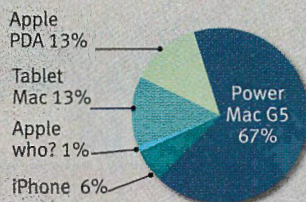
Thanks, Kris! To access Safari's Debug Menu, launch the Terminal and type the

Mozilla 1.1
Netscape 7.0
Netscape 6.2.2

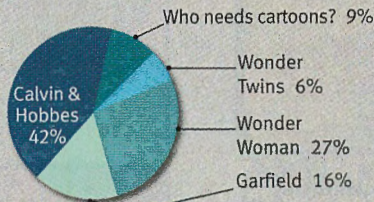
Set Safari to pose as Netscape 7.0 in the Debug Menu.

SURVEY SAYS Online Poll Results

What rumored Apple product has the best chance of becoming a real product?



What comic-book characters are most in need of their own major motion picture?



826 respondents. Poll taken before G5 announced.

READER POLL

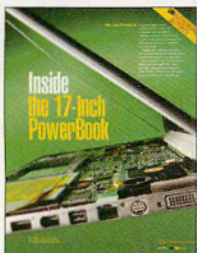
Q Has the Apple iTunes Music Store increased, decreased, not affected your desire to illegally download free music?

To answer, click online at www.macaddict.com before August 10, 2003. See the

following command:
**defaults write (space)
com.apple.Safari (space)
IncludeDebugMenu 1**
The next time you launch
Safari, the Debug Menu will
appear, and you can choose
an alter ego.—*Max*

THAT'S DEAD ON

Concerning the
"Unauthorized Autopsy"
on the 17-inch PowerBook
(Jul/03, p39), autopsies are
usually performed on things
that are dead, mainly to
determine cause of death.



It's alive!

I am sure the PowerBook
you disassembled was in
working condition. Maybe a
better title would have been
"PowerBook Exploratory
Surgery."—*John Agres*

Yes, our 17-inch PowerBook
was and is alive and
kicking—but we think it had
an out-of-body experience.
—*Max*

ZERO-WIDGET ALERT!

I read your response to the
letter asking why you never
dole out the zero-widget
rating (*Log Out*, Jul/03, p94).
You mentioned that an app



**David's Self-Combust
application did just that.**
could earn such a rating if
it were to "self-combust."
In the hope of earning
the lowest-possible
rating, I have written a
self-combusting program
([www-personal.umich.edu
/~hanauer/Self-Combust](http://www-personal.umich.edu/~hanauer/Self-Combust)).
—*David Hanauer*
Congratulations! You
are now only the second
recipient of the dreaded
zero-widget rating. (See
Shut Down, Aug/03, p96,
for the tragic results of our
first.)—*Max*

BUSTED

I was reading your review
of FreeHand MX (*Reviews*,
Jun/03, p49), when I
noticed that the Dock on
Mr. Osborn's Desktop
clearly shows apps—such
as LimeWire and SaltMine
Reader X (a database of
pirated serial numbers)—
whose purpose is
questionable at best.
—*Darren Smith*
Hey, how do you know
what all those apps are,
anyway? Seriously, though,
**MacAddict does not condone
stealing software or media.**
—*Max*

CONTEST

MacAddict

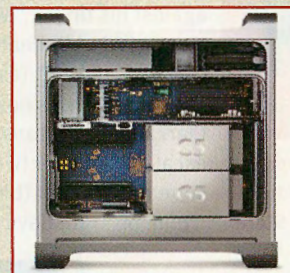
WIN A CARD AND CAMERA



Win this Nikon Coolpix
5400, complete with
a 2GB Lexar Media
CompactFlash card.

Win a just-released 5.1-megapixel Nikon Coolpix
5400 digital camera (\$799, www.nikonusa.com)
and a massive Lexar Media 2GB—yes, *gigabyte*—
CompactFlash card (\$699.99, www.lexarmedia.com)
for storing all of your shots. All you need to do is write
the wittiest caption for the picture below and send it in.

ENTRY FORM



Write a caption for this picture.

CONTESTANT INFORMATION

Full Name: _____
Address: _____
City: _____ State: _____
Zip: _____
Email or telephone: _____

Send snail-mail entries to: Lexar Nikon Contest
MacAddict magazine, 150 North Hill Dr., Brisbane, CA 94005

Send email entries to contest@macaddict.com. Subject: Lexar Nikon Contest

Deadline for entry: September 30, 2003. Contest results will appear in
our Jan/04 issue.

Contest Rules

The judges will be MacAddict editors, and they will base their decision on 50 percent humor and 50 percent creativity.
All entries must be received no later than September 30, 2003, with the winner announced around January 2004. By
entering this contest, you agree that Future Network USA may use your name, likeness, and Web site for promotional
purposes without further payment. All prizes will be awarded and no minimum number of entries is required. Prizes
won by minors will be awarded to their parents or legal guardians. Future Network USA is not responsible for damages
or expenses the winners might incur as a result of this contest or the receipt of a prize, and winners are responsible for
income taxes based on the value of the prize received. A list of winners may also be obtained by sending a stamped,
self-addressed envelope to Future Network USA c/o MacAddict Contest, 150 North Hill Dr., Brisbane, CA 94005. This
contest is limited to residents of the United States. No purchase necessary; void in Arizona, Maryland, Vermont, Puerto
Rico, and where prohibited by law.

PHOTOGRAPHY COURTESY OF APPLE

- **Increased** I now steal music more than ever.
- **Decreased** At only 99 cents a track, I can afford to be ethical.
- **Not affected** I download illegal music at about the same rate.
- **How dare you** I have never and will never download music illegally.

November 2003 issue for the results.
Check www.macaddict.com for a new
poll each month.

CONTEST

WINNER! Reader Survey Contest Results

Congratulations to **Brian Cren**,
who filled out MacAddict's Reader
Survey and was randomly selected
to win a LaCie Data Bank 20GB
hard drive (\$299, www.lacie.com).

Congrats also to **Superleman**, who
filled out MacAddict's Bonus Reader
Survey and was randomly selected
to win a SCSI cable autographed by
the MacAddict staff.

THE ONES APPLE LEFT BEHIND

Musicians React to Not Making the iTunes Indie Cut

In its efforts to expand the collection of independent (indie) music labels represented in the iTunes Music Store, Apple wooed a number of smaller companies at a party earlier this summer. Some signed on, others didn't—but what about those who weren't even invited? *MacAddict* tracked down a number of musicians who didn't make the list to get their reactions.



You won't find tracks from this independently produced CD in the iTunes Music Store.

"Well, it's obvious that no one at Apple has picked up one of my CDs" said piano player for Nordstrom, **Timothy Tesh**, gesturing to a stack of CDs propped against his tip jar. "My rendition of the classic 'Wind Beneath My Wings' is a real gem—jazzy." Tesh's new album, *Tesh Me Softly*, is now available atop the Clarksdale, CA store's piano next to the escalator on floor two near the women's shoe department (between 1 p.m. and 4 p.m. on Thursdays only).

The work of German music experimentalist, **Bernd Weinmann**, was also overlooked. Weinmann is known by a few people for layering the sounds of screeching old women, guinea pigs, and parrots over a base track of engines tearing themselves apart. When asked about his exclusion from the iTunes music store, he replied, "Sie mochten nicht meinen Opus 'das Automobil,' also muß ich rüber beginnen. Scheiße."



An enthusiastic Weinmann during his 2002 living-room performance.

John Lima of *Three Guys and a Mandolin*, described on locally distributed flyers as "a versatile special-occasion band ready to serve your needs," felt Apple missed out on a prime money-making opportunity. "We feel Apple didn't take our wide range of services into account. We not only play everything from Klezmer to Dixieland Jazz, but we take care of all the trimmings—balloons, crepe paper, the works." Lima also expressed discontent with Apple's not including contact info along with tracks in iTunes, saying, "If you're browsing around iTunes, planning music for a ceremony at the Grand Lodge here in Portola, how are you going to know about Auntie Joe's Secret BBQ catering option—a great value at \$5.99 a plate—unless you can give us a call?"



Paul, John, and George of the versatile band *Three Guys and a Mandolin*.



Kennedy Middle School Jazz Ensemble and Show Choir actually sent in a videotape of a rehearsal with the understanding that they'd be invited to record something for iTunes. **Kelsey Kandel**, first chair of the saxophone section, was especially disappointed. "It's so torqued. I quit marching band and parade band to focus on our combo group. I practiced Kyrie Eleison every night for weeks for nothing. And now I don't get to go to Rose Bowl."



Declined an invitation to Apple's independent-music meeting, members of the **Kennedy Middle School Jazz Ensemble** were left out in the cold.



Local park musician "Jerry" declined to comment.

Flute player and chanter "**Jerry**" refused to talk to us at length about not being included in Apple's search, calling *MacAddict* staff members "corporate tools." Bystander and friend "**Jessie**" shook his head. "He's just pissed 'cause **Free Wind** burned him. She didn't want to do the park gig anymore." Free Wind is a Los Angeles area singer who gives a voice to the culture of her people—namely her great-great grandmother's half-sister who was rumored to have been the daughter of a real Native American.

But not all musicians harbored bitterness or anxiety about being excluded. We found **Bob Jake** on the back porch of his home with a bunch of fellow bluegrass and folk musicians and friends. He laughed, "The name of our band is **Whoever Shows Up To Play**. I mean, we don't have any official recording or anything, though we coulda pulled somethin' together if Apple asked us. But we're just out here makin' music for our neighbors and havin' fun."



Easy-going banjo player, **Bob Jake**, takes a break after "puttin' up some fencing" on his property.

Don't let your children
use the Internet
on their own!

ContentBarrier X protects your children from inappropriate content.



Intego ContentBarrier X, content filtering for home and business use. Protect your family by filtering undesirable websites and predatory language in chats. Increase productivity by limiting employee access on the job. All this in one intuitive, robust package.

Parental Alerts • Content Filters • Full Log of Web Sites Visited **only \$59⁹⁵**



Buy now:

512-637-0700

www.intego.com



we protect your world.

Intego • 500 North Capital of Texas Highway, Suite 8-150 • Austin, TX 78746 • Ph: (512) 637-0700 • Fax: (512) 637-0701 • sales@intego.com

BUY 1, GET 4 FREE*



*Purchase one full copy of TechTool Pro 3 or Drive 10 and get a free upgrade to TechTool Pro 4 when it ships at the end of summer, 2003

TTP: 4 TECHTOOL PRO 4

The ultimate computer repair utility for the Macintosh



Offer expires October 31, 2003.
Only available on specially marked packages.
Promotional offers cannot be combined. Void where prohibited.

